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THE REGISTRAR GENERAL'S STATISTICAL REVIEW OF ENGLAND AND WALES FOR THE YEAR 1952

TEXT VOLUME

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THE

REGISTRAR GENERAL'S

STATISTICAL REVIEW

OF

ENGLAND AND WALES

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EXPLANATORY NOTES

1. Population revision

Some of the rates shown in this volume for years 1951 and 1952 differ slightly from similar rates published in the Tables volumes of the Statistical Review for those years, owing to the revision, in the light of final data from the 1951 Census, of the population estimates on which they are based (see page 7).

2. Numbering of Tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in "Tables, Part I—Medical," and those lettered will be found in "Tables, Part II—Civil," for the year in question, whilst those numbered in Roman numerals appear in this volume.

3. Indication of Significance

Rates based upon less than 20 births, deaths or cases notified are distinguished by italic type as a warning to the user that the smallness of the experience may affect their significance. Rates given as 0 indicate that the rate is insignificant. A dash (—) in tables showing rates indicates that there were no births, deaths or cases.

4. Regions

The constitution of the Standard Regions of England and Wales that are used in this volume is as follows :—

REGION I.
Northern.
Cumberland.
Durham.
Northumberland.
Westmorland.
Yorkshire, North Riding.

REGION II.
East and West Ridings.
Yorkshire, East Riding.
Yorkshire, West Riding.

REGION III.
North Midland.
Derbyshire, Part of[1]
Leicestershire.
Lincolnshire—
Parts of Holland.
Parts of Kesteven.
Parts of Lindsey.
Northamptonshire.
Nottinghamshire.
Peterborough, Soke of.
Rutland.

REGION IV.
Eastern.
Bedfordshire.
Cambridgeshire.
Ely, Isle of.
Essex, Part of[2]
Hertfordshire, Part of[3]
Huntingdonshire.
Norfolk.
Suffolk, East.
Suffolk, West.

REGION V.
London and South Eastern
Essex, Part of[4]
Hertfordshire, Part of[5]
Kent.
London, Admin. County.
Middlesex.
Surrey.
Sussex, East
Sussex, West.

REGION VI.
Southern.
Berkshire.
Buckinghamshire.
Dorset.
Oxfordshire.
Southampton.
Wight, Isle of.

REGION VII.
South Western.
Cornwall.
Devon.
Gloucestershire.
Somerset.
Wiltshire.

REGION VIII.
Wales I.
Brecknockshire.
Carmarthenshire.
Glamorganshire.
Monmouthshire.

Wales II.
Anglesey.
Caernarvonshire.
Cardiganshire.
Denbighshire.
Flintshire.
Merionethshire.
Montgomeryshire.
Pembrokeshire.
Radnorshire.

REGION IX.
Midland.
Herefordshire.
Shropshire.
Staffordshire.
Warwickshire.
Worcestershire.

REGION X.
North Western.
Cheshire.
Derbyshire, Part of[6]
Lancashire.

1. All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D., and Chapel en le Frith R.D.

2. All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D., and Chigwell U.D.

3. All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D., and Elstree R.D.

4. All areas stated in 2 above.

5. All areas stated in 3 above.

6. All areas stated in 1 above.

5. Conurbations

The conurbation areas used in this volume were agreed by an interdepartmental committee, representing the principal Departments preparing statistics, as a means of securing uniformity and comparability in statistics published by Government Departments in the United Kingdom.

Conurbation is the word used to describe those areas of urban development where a number of separate towns have grown into each other and become linked by such factors as a common industrial or business interest, or a common centre of shopping, education, etc. The conurbations are each made up of a collection of complete local authority areas, constituted as follows :—

Tyneside

Durham		*Northumberland*	
Gateshead C.B.	Felling U.D.	Newcastle-upon-Tyne C.B.	Longbenton U.D.
South Shields C.B.	Hebburn U.D.	Tynemouth C.B.	Newburn U.D.
	Jarrow M.B.		Wallsend M.B.
	Whickham U.D.	Gosforth U.D.	Whitley Bay U.D.

West Yorkshire

Yorkshire, West Riding

Bradford C.B.
Dewsbury C.B.
Halifax C.B.
Huddersfield C.B.
Leeds C.B.
Wakefield C.B.

Aireborough U.D.
Baildon U.D.
Batley M.B.
Bingley U.D.
Brighouse M.B.

Colne Valley U.D.
Denby Dale U.D.
Denholme U.D.
Elland U.D.

Heckmondwike U.D.
Holmfirth U.D.
Horbury U.D.
Horsforth U.D.
Keighley M.B.

Kirkburton U.D.
Meltham U.D.
Mirfield U.D.
Morley M.B.

Ossett M.B.
Pudsey M.B.
Queensbury and Shelf U.D.
Ripponden U.D.
Rothwell U.D.

Shipley U.D.
Sowerby Bridge U.D.
Spenborough U.D.
Stanley U.D.

South East Lancashire

Cheshire

Stockport C.B.

Alderley Edge U.D.
Altrincham M.B.
Bowden U.D.
Bredbury and Romiley U.D.
Cheadle and Gatley U.D.
Dukinfield M.B.
Hale U.D.
Hazelgrove and Bramhall U.D.
Hyde M.B.
Marple U.D.
Sale M.B.
Stalybridge M.B.
Wilmslow U.D.

Disley R.D.

Lancashire

Bolton C.B.
Bury C.B.
Manchester C.B.
Oldham C.B.
Rochdale C.B.
Salford C.B.

Ashton-under-Lyne M.B.
Audenshaw U.D.
Chadderton U.D.
Crompton U.D.
Denton U.D.

Droylsden U.D.
Eccles M.B.
Failsworth U.D.
Farnworth M.B.
Heywood M.B.

Horwich U.D.
Irlam U.D.
Kearsley U.D.
Lees U.D.
Littleborough U.D.

Little Lever U.D.
Middleton M.B.
Milnrow U.D.
Mossley M.B.
Prestwich M.B.

Radcliffe M.B.
Royton U.D.
Stretford M.B.
Swinton and Pendlebury M.B.
Tottington U.D.

Urmston U.D.
Wardle U.D.
Westhoughton U.D.
Whitefield U.D.
Whitworth U.D.
Worsley U.D.

Limehurst R.D.

Merseyside

Cheshire

Birkenhead C.B.
Wallasey C.B.

Bebington M.B.

Ellesmere Port U.D.
Hoylake U.D.
Neston U.D.
Wirral U.D.

Lancashire

Bootle C.B.
Liverpool C.B.

Crosby M.B.

Huyton with Roby U.D.
Litherland U.D.

West Midlands

Staffordshire

Smethwick C.B.
Walsall C.B.
West Bromwich C.B.
Wolverhampton C.B.

Aldridge U.D.
Amblecote U.D.
Bilston M.B.
Brierley Hill U.D.
Coseley U.D.

Darlaston U.D.
Rowley Regis M.B.
Sedgley U.D.
Tettenhall U.D.
Tipton M.B.

Wednesbury M.B.
Wednesfield U.D.
Willenhall U.D.

Warwickshire

Birmingham C.B.

Solihull U.D.
Sutton Coldfield M.B.

Worcestershire

Dudley C.B.

Halesowen M.B.
Oldbury M.B.
Stourbridge M.B.

Greater London

London
(whole county)
Middlesex
(whole county)
Surrey

Croydon C.B.

Banstead U.D.
Barnes M.B.
Beddington and Wallington M.B.
Carshalton U.D.

Coulsdon and Purley U.D.
Epsom and Ewell M.B.
Esher U.D.

Kingston upon Thames M.B.
Malden and Coombe M.B.
Merton and Morden U.D.
Mitcham M.B.

Richmond M.B.
Surbiton M.B.
Sutton and Cheam M.B.
Wimbledon M.B.

Kent

Beckenham M.B.
Bexley M.B.
Bromley M.B.
Chislehurst and Sidcup U.D.
Crayford U.D.
Erith M.B.
Orpington U.D.
Penge U.D.

Hertfordshire

Barnett U.D.
Bushey U.D.
Cheshunt U.D.
East Barnet U.D.
Elstree R.D.

Essex

East Ham C.B.
West Ham C.B.

Barking M.B.
Chigwell U.D.
Chingford M.B.
Dagenham M.B.
Ilford M.B.

Leyton M.B.
Waltham Holy Cross U.D.
Walthamstow M.B.
Wanstead and Woodford M.B.

6. General

See also explanatory notes to the Tables volumes, Parts I and II.

CORRIGENDA

Statistical Review : 1951 Text Volume

Page 59	Table XXX, Illegitimate Live Births, Ratio of Local to National Rate, Merseyside Conurbation : *for* 0.26 *read* 1.26.
Page 97	Table XLVIII, heading of Table, *for* Civilian *read* Home.
Page 104	Line 4, *for* 1891-1950 *read* 1891-1900.
Page 138	Line 4 *for* 64M *read* 64F. Line 7 *for* 58F *read* 58M Line 13 *for* 39F *read* 37F Line 14 *for* 57F *read* 57M
Page 293	Table CXXXVII, Local Government Register, 1951 (20th Nov. 1950), *for* 30,501,306 *read* 30,501,106.

INTRODUCTION

Civil and Medical Statistics

The statistical commentary in this volume falls into two main parts corresponding to the division of the Tables volumes into Civil and Medical statistics respectively.

The civil part is concerned in the main with population, births and fertility, marriages and divorces. The primary aim here is to show what trends are apparent in post war experience and to compare them as far as possible with the pre-war position.

The medical part of the present volume is concerned primarily with mortality statistics, but in the tuberculosis section numbers of notifications are discussed and in the cancer section use is made of statistics of cases registered to assist in interpretation of mortality figures. Figures of notifications of infectious diseases are included in Part I of the Review (Medical Tables). The Survey of Sickness (which had provided information continuously since 1944 about illness in the population, frequency of consultation with doctors and duration of incapacity from sickness) was discontinued in March, 1952. The other morbidity enquiries for which the General Register Office is responsible have continued to develop and expand since 1952 and their results(1) should become increasingly useful. In developing these enquiries, in improving mortality statistics, and in medical classifications the advice of the Registrar General's Medical Advisory Committee has been most valuable ; the Report on their work in the two years to November, 1952 is reproduced on page 228 and a further Report, to November, 1954, has been published in the Registrar General's Quarterly Return for the December Quarter, 1954 (No. 424).

Population

The provision of final figures from the full tabulations of the 1951 Census (as distinct from preliminary figures derived first from enumerators' summaries and later from the one per cent sample) has made it possible to complete a final revision of the population estimates (including estimates by marital condition) for England and Wales for 1951 and 1952. The results are shown on pages 6, 10 and 253. 1952 was the last year for which population estimates could be made by the procedure, involving the use of national registration and food rationing data, which had been followed since 1940. This section also contains a brief note on the accuracy of population estimates with particular reference to migration statistics.

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(1) The latest publications are :—

The Registrar General's Statistical Review of England and Wales for the years 1950 and 1951—
Supplement on General Morbidity, Cancer and Mental Health. H.M.S.O., price 8s. 6d. net:
Supplement on Hospital In-patient Statistics. H.M.S.O., price 7s. 6d. net:

Studies on Medical and Population Subjects, No. 7 : General Practitioners' Records—
An analysis of the clinical records of eight practices during the period April 1951 to March 1952. H.M.S.O., price 8s. 6d. net.

Births and Fertility

This is one of the more important subjects dealt with in this volume. The value of population studies lies not only in their analysis of the present population and its composition but in the indications they can give of future trends. For this reason an analysis of fertility is essential both to show what has happened and to see whether any guide to the future can be obtained.

Pages 12 to 16 of the present volume discuss evidence which suggests that fertility has reached a comparatively stable level after the post-war fluctuations. There is, so far, no reason to believe that the long decline in fertility of the kind experienced prior to the early thirties has been resumed. Nevertheless it has to be borne in mind that the high marriage rates of recent years may have temporarily inflated the numbers of births, and that comparative stability does not mean that there is not still, however slow, a continuing downward tendency in numbers of births. Although there is no likelihood of a serious impairment of replacement prospects in the near future, the persistence of this tendency is a matter for close observation and the events of the next few years are crucial to judgment of fertility trends.

The evidence suggests that the tendency to concentrate births into the earlier years of married life is continuing.

Marriage, Widowhood and Divorce

There is an obvious interaction between marriage rates and fertility and population structure generally. While the tendency for more people to marry younger is continuing, the 1952 figures suggest that the decline in marriage rates, which was forecast as a consequence of the depletion of the marriageable population by the very high marriage rates of recent years, may have begun.

The current level of mortality at ages under 45 is so low that the termination of marriages by death is not significantly depleting the population of married women in the child bearing ages (pages 58-59). The influence of divorce on the numbers of married persons in the community is discussed on pages 60-63. The numbers of petitions for divorce during 1952 continued to show the effect of the Legal Aid and Advice Act, 1949, which increased the facilities for divorce available to persons of limited means. The figures suggest that the proportion of divorced persons who ultimately remarry is rising and is perhaps in the region of two-thirds to three-quarters, so that the net loss to the married population is only a small fraction of the total number divorced ; and nearly 40 per cent of those divorced already have two or more children, only 30 per cent being childless.

Mortality by Social Class

The most important ways in which mortality statistics are analysed in order to assist in administration of health services or in medical research are to show changes through time, differences by sex age and cause, differences between areas, seasonal variations, and differences between occupational or social groups. All of these are considered in one place or another in this volume ; the last can normally be studied in detail only in relation to the populations in different groups as enumerated at a census. The extraction of population figures based on a one per cent sample of the 1951 Census records has made it possible to prepare and publish(1) broad occupational and social class mortality figures in advance of the full analysis for the years 1949-53. These preliminary figures, relating to deaths in 1950, suggest that the consistent mortality gradient of earlier years, rising from Social Class I to Social Class V, has been broken by lower mortality in Social Class II than in Social Class I for both adult men and their wives and

(1) Registrar General's Decennial Supplement, England and Wales, 1951—Occupational Mortality Part I. H.M.S.O., 7s. 6d. net.

lower mortality among men aged 20-64 in Social Class IV than in Social Classes I or III. What changes in environment, education, economic status or medical treatment may have resulted in this apparent departure from the traditional pattern requires more investigation, since they may be relevant to further reduction of mortality in the future. The preliminary analysis shows broadly which diseases cause higher mortality in Social Class I than in Social Class V and vice versa and the fuller study of this subject which is being undertaken in relation to more closely defined occupation groups may throw further light on the changes which have taken place in the mortality pattern. Perhaps of equal significance to these changes at adult ages is the failure to reduce relative Social Class differentials in infant mortality. Attention was drawn to this in the Medical Text for 1948-1949 and it has since been emphasized in one[1] of a series of papers relating to the detailed investigation of infant mortality in which the Social Medicine Research Unit of the Medical Research Council are collaborating with the General Register Office.

Mortality in 1952

The number of deaths registered in England and Wales in 1952 was less than 500,000 for the first time since 1948 and the crude death rate, at 11·3 deaths per thousand population, was less than in any previous year except 1948, when it was 11·0. These figures reflect the year's freedom from prolonged cold weather and from any influenza epidemic, the two main influences of recent years in producing high death rates. The maps on pages 68-70 strikingly demonstrate the gradation of the level of mortality from the North and West to the South-east of the country.

Table XLVII (page 78) and the comments on pages 71-72 clearly demonstrate the differences in the main causes of death at different ages. In each of the age-groups 1-4, 5-14 and 15-24 accidents were responsible for more than one-fifth of all the deaths ; at ages 25-44 cancer was responsible for more than one-fifth of the deaths and for nearly a quarter at ages 45-64 ; heart disease accounted for more than a quarter of the deaths at ages 45-64 and at 65-74, increasing to more than a third at ages 75 and over. In considering the relative importance of different causes of death, it may sometimes be desirable to take account of the age at death as well as the simple numbers of deaths. The concept of 'years of life lost'[2] is one way of doing this. If it is assumed that any years prior to age 85 are 'lost' years of life, the use of this concept does not make any startling difference in the relative importance of the major causes of death in 1952—heart disease would represent 23 instead of 32 per cent of the total, cancer would remain at 18 per cent, while accidents would increase from 3 to 5 per cent ; but the change would be greater if a lower age limit were assumed. This concept, which has been used occasionally in the past, may prove useful where it is desired to emphasise the importance of diseases which kill young.

A table showing the seasonal variation of death from certain causes by age (page 75) has been included at the suggestion of the Registrar General's Medical Advisory Committee. The most notable difference in seasonal variation for different age groups occurs for motor vehicle traffic accidents and accidental falls, where deaths show a summer excess at ages under 45 and a winter excess at ages 45 and over ; this may reflect a lower resistence to injury among old people in the winter months. For the other causes shown seasonal variations do not appear to change much with age.

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(1) Morris, J. N., and Heady, J. A. : Mortality in Relation to the Father's Occupation 1911-1950, Lancet, vol. I, p. 554, 1955.

(2) Monthly Bulletin of Min. of Health and Public Health Laboratory Service, p. 244, December, 1953.
Medical Officer vol. XCI, No. 22, p. 251, 1954.
The Registrar General's Quarterly Return, June, 1955.

Atmospheric Pollution

The most notable mortality incident of 1952 was in December when the acute hazards to life produced by heavy atmospheric pollution were brought dramatically to public notice by the 4,000 deaths attributed to the heavy fog in the London area in the period 6th to 10th December(1). There followed the announcement of the Government's decision to set up a Committee under Sir Hugh Beaver to examine the nature, causes and effects of air pollution and the efficacy of present preventive measures, to consider what further preventive measures are practicable, and to make recommendations ; the memory of these deaths was a major factor in the interest aroused by the proposals in the Committee's report(2). Such episodes are fortunately rare, but the continuing though much more insidious long-term effects of atmospheric pollution on health are probably more serious in the suffering and economic loss which they inflict on the community. Evidence so convincing as 4,000 deaths from less than one week's fog cannot easily be produced, but the association of high mortality with large urban areas has repeatedly been demonstrated. If areas could be graded according to the amount and kind of pollution of their atmosphere, the extent to which this association is due to atmospheric pollution could be assessed and further light might be thrown on the ætiology of diseases such as bronchitis and cancer of the lung.

Infant Mortality

A new low record each year for the infant mortality rate has been taken almost for granted in recent years and 1952 renewed the trend after its slight disturbance in 1951, caused by the influenza epidemic. The dependence of this trend on the decline in mortality after the first week of life is emphasised (page 88), as is the increasing relative importance of respiratory infections in this period ; between 1949 and 1952 it was gastro-enteritis, with a decline of 62 per cent, which set the pace for the decline in mortality from causes operating after birth and further rapid decline in this group must depend on progress in combating the respiratory infections (page 88).

Further progress in reducing the total loss from stillbirths and infant deaths will, however, become increasingly dependent on what can be done to reduce the loss before or during birth and in the first week after birth, which together represented three-quarters of the total loss in 1952 and, if trends since 1948 were to continue, would represent 95 per cent of the total loss by 1970 (page 89).

Infectious Diseases

The present volume does not contain a general commentary on the notifications and deaths for the infectious diseases. Detailed figures are included in the Tables (Part I) Volume and comment on them is contained in the Report of the Chief Medical Officer of the Ministry of Health(3). For a number of infectious diseases the proportion of the deaths represented by late effects causing death several years after onset of the disease is becoming significant. To enable readers to take account of these, details of such deaths are given on page 210.

This volume does, however, contain a discussion of mortality from syphilis and aortic aneurysm, taking account of effects of changes in classification. It is notable that, in contrast with other types of syphilitic disease, there has been no decline in mortality from aortic aneurysm since 1940. The outstanding

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(1) Logan, W. P. D. : Mortality in the London Fog Incident, 1952, Lancet vol. I, p. 336, 1953. Logan, W. P. D. : Mortality and Morbidity during the London fog of December, 1952. Min. of Health Reports on Public Health and Medical Subjects, No. 95.

(2) Committee on Air Pollution, Report, 1954. H.M.S.O., 2s. 6d. net.

(3) Report of the Ministry of Health for the year ended 31st December, 1952, Part II—On the State of the Public Health, H.M.S.O. 6s. 6d. net.

features of mortality from syphilis in different types of area are the very high rates at ages over 65 in Greater London and the low rates in rural districts (page 138).

Tuberculosis

While there was again a substantial fall in mortality from tuberculosis in 1952, notifications again declined only slightly ; the only age group, apart from boys aged 10-14 where the numbers of deaths are small, which did not share in the fall in mortality from respiratory tuberculosis was women of 75 and over. In notifications of respiratory tuberculosis, but not in mortality, men aged 35-44 have, since 1944, shown lower rates than for the age groups immediately younger and older.

A comparison of notification and death rates for respiratory tuberculosis between administrative counties and associated county boroughs shows, in general, relatively high rates in more urban areas, but there are exceptions (page 110). The similarity in rates in certain of the conurbations, particularly Tyneside and Merseyside, is very striking (page 112). Attention is drawn to the continuing social class differentials in mortality from respiratory tuberculosis.

Cancer

Since 1936 the male death rates from all forms of cancer have risen in each age group, but, if cancer of the lung is excluded, death rates at ages 35 to 54 have shown little change, at ages 55 to 74 they have declined fairly steadily, while at ages 75 and over they declined until about 1944 since when they have increased again. The female death rates have tended to fall in each age group between 35 and 75, even when cancer of the lung is included ; at ages over 75 the trend has been similar to that for males. These figures suggest that, unless incidence has changed, improved treatment has had a substantial effect in reducing deaths at ages under 75.

A slackening in the rate of increase in mortality from cancer of the lung at younger ages was noted in the Review for 1948-1949 (Medical Text, page 158). This tendency to stabilisation has become apparent up to age 55, a fact which is used as a basis for estimating, on certain assumptions, how long the total number of deaths would continue increasing and what figure they might reach (page 151).

For several sites of cancer, tentative use is made of the figures of cases registered in the national Cancer Registration scheme to throw light on the significance of changes in the mortality figures. For some sites the degree of completeness of registration is approaching the stage when this can reasonably be done and recent progress in registration is likely to throw much further light on mortality changes.

Accidental and Violent Deaths

The importance of accidents as a cause of death among people under the age of 25 has already been commented on ; since 1948 the proportion of deaths at ages under 35 assigned to accidents or other violence has increased, the most alarming increase being among young men aged 15-34 where violent deaths have increased by 12 per cent while total deaths have decreased by 27 per cent. Most of these " accidents " could in fact be prevented without imposing undue restraint on the young men or on others. Total deaths from accidents and other violence were in fact less in 1952 than in either 1950 or 1951, but death rates for men at ages between 15 and 25 were the highest recorded since the end of the war.

POPULATION

Since publication of the previous Statistical Review the provision of final figures from the full tabulations of the 1951 Census (as distinct from preliminary figures derived first from enumerators' summaries and, later, from the 1 per cent sample) have made it possible to complete a final revision of the population estimates for England and Wales by sex and age for 1951 and 1952. The results are shown in Table I.

Table I.—Estimates of Total, Civilian and Home Populations by Sex and Age. England and Wales, 1951 and 1952

Note—These are revised estimates based upon the final data by sex and age from the 1951 Census

(*Thousands*)

Age Group	Mid-1951						Mid-1952					
	Males			Females			Males			Females		
	Total	Civilian	Home	Total	Civilian	Home	Total	Civilian	Home	Total	Civilian	Home
0– ..		1,910			1,819			1,794			1,711	
5– ..		1,642			1,568			1,787			1,705	
10– ..		1,422			1,377			1,429			1,380	
15– ..	1,395	1,139	1,333	1,370	1,364	1,370	1,393	1,125	1,331	1,368	1,362	1,368
20– ..	1,494	1,241	1,417	1,489	1,480	1,487	1,484	1,204	1,388	1,471	1,462	1,470
25– ..	1,635	1,561	1,615	1,641	1,639	1,640	1,592	1,519	1,570	1,590	1,588	1,590
30– ..	1,547	1,495	1,533	1,579	1,578	1,579	1,603	1,550	1,588	1,630	1,629	1,630
35– ..	1,632	1,595	1,623	1,681	1,680	1,681	1,583	1,547	1,574	1,632	1,631	1,632
40– ..	1,667	1,647	1,662	1,704	1,703	1,704	1,659	1,637	1,654	1,697	1,696	1,697
45– ..	1,567	1,559	1,565		1,637		1,588	1,580	1,587		1,648	
50– ..	1,313	1,311	1,313		1,492		1,361	1,358	1,361		1,512	
55– ..	1,089	1,088	1,089		1,344		1,101	1,100	1,101		1,358	
60– ..	944	944	944		1,209		949	949	949		1,219	
65– ..		780			1,051			782			1,060	
70– ..		592			836			595			850	
75– ..		374			554			380			573	
80– ..		169			283			175			294	
85 and over		61			140			65			148	
All Ages	21233	20530	21044	22774	22754	22771	21320	20576	21110	22846	22826	22845

The census enumeration is the most accurate figure that can be obtained of the total population of the country, and estimates of that population made close to the census date are not likely to be appreciably inferior in quality to the enumeration. The movement from one mid-year estimate to the next is dependent upon information derived from the registration of births and deaths (and of marriages and divorces in the case of marital condition estimates) and upon the available statistics of external migration which fortunately is a small element at present. There is no reason to doubt the high quality of registration data since the safeguards for complete and accurate registration have evolved

over a long period of time and are continually being adapted to changing conditions; but the quality of migration statistics is poor indeed. No comprehensive migration statistics exist. The Board of Trade publish statistics of the balance of civilian passenger movement into and out of the United Kingdom; this is not a migration balance. For sea travel only, the Board of Trade publish figures, by sex, of the numbers who, as recorded on ships' manifests, have declared their intention to reside for at least a year in the country of destination. This relates only to movement to or from non-European countries. Movement by air or across the continent of Europe is excluded, and the figures therefore provide a very incomplete measure of the balance of permanent migration. All these figures appear in Table S of the Statistical Review Part II. Certain supplementary figures are available of sex and age distributions of such "permanent migrants" and the Home Office provides information of the characteristics of aliens.

The estimation of the actual balance of migration cannot be precise. It depends upon long experience with the handling of the figures and long acquaintance with the meaning of fluctuations which are apt to occur. As the estimates move more distant in time from the census therefore their precision is reduced until the next census once more provides a new base upon which to re-establish a fresh series of intercensal estimates. This reduction in precision is however limited by the present small dimensions of the net migration balance. Migration statistics had been much improved in recent years by the existence of the National Register. With its abolition on 21st February, 1952, the data on migration deteriorated in quality and quantity; but as long as food rationing continued the deficiency was felt more in relation to movement between local areas than to that in and out of the country. It was therefore possible to make the estimates for 1952 by much the same procedure as in earlier years, starting from the 1951 estimates, adding births and immigrants and subtracting deaths and emigrants, the total being reviewed in the light of the food ration book issue statistics before adoption. Only the distribution of the migrants by sex, age and marital condition had to be based more on past experience than on current information. This applies both to the original estimates published in the Tables Volumes of this Review for 1951 and 1952, and to the revised figures in Table I, which are derived from the final tabulations of the 1951 Census by sex and age.

The three different types of population shown are based on different concepts. For the *home* population, all Armed Forces (including Commonwealth and Allied Forces) are treated as resident where stationed. If the whole contribution of England and Wales to the United Kingdom Forces, whether at home or abroad, is included and Commonwealth and Allied Forces here are excluded, this provides a measure of the *total* population to which England and Wales can lay claim (in this measure merchant seamen and British visitors abroad are excluded but are roughly balanced by visitors to this country who though included are not properly members of the population of England and Wales). If all Armed Forces are excluded, this provides the *civilian* population.

Estimate Correction.—Table II shows the extent to which the 1952 estimate was retrospectively revised. This revision arose partly from the difference between the final tabulations by sex and age and those of the 1 per cent sample and partly from the under-enumeration of infants and misstatement of age. Under-enumeration of infants was corrected by direct estimation from births, and age misstatement by graduation of census figures. The majority of the differences in individual cells are less than 1% of the original figures; larger corrections were made for females at advanced ages.

Table II.—Correction of Population Estimates, England and Wales, Mid-1952

Original Estimate minus Final Estimate

(*Thousands*)

Age Group	Males			Females		
	Total	Civilian	Home	Total	Civilian	Home
0– ...		+ 1			0	
5– ...		—17			—14	
10– ...		+15			+ 9	
15– ...	0	—11	0	+16	+16	+16
20– ...	—12	—11	—20	+ 1	+ 1	0
25– ...	—13	—15	—16	— 9	— 9	— 9
30– ...	+ 2	+ 1	+ 1	— 4	— 4	— 4
35– ...	+ 3	+ 2	+ 2	+ 3	+ 3	+ 3
40– ...	+18	+18	+18	+ 6	+ 6	+ 6
45– ...	+ 9	+ 8	+ 8		— 4	
50– ...	+ 5	+ 5	+ 5		— 1	
55– ...	+13	+13	+13		— 5	
60– ...	+ 6	+ 6	+ 6		— 1	
65– ...		+ 1			—10	
70– ...		—76			+ 5	
75– ...		— 2			+ 2	
80– ...		+ 2			— 7	
85 and over		— 2			—10	
All Ages	+23	+ 8	+ 9	—23	—23	—24

Population Movement.—The approximate amount and composition of the change in the total population in the year since mid-1951 are shown in Table III.

Table III.—Analysis of Population Movement 1951-52 and Comparison with 1946-51

Mid-year to Mid-year		Increase or Decrease (—) in Total Population						
		Total			Births	Deaths	Natural Increase	Net Migration
		Persons	Males	Females				
1951–52	Thousands	159	87	72	669	—484	185	—26
	Per cent	0·36	0·41	0·32	1·52	—1·10	0·42	—0·06
1946–51	Per cent per annum	0·61	0·67	0·55	1·80	—1·19	0·61	0·00

It will be seen that the increase of 159,000 is, as in most recent years, mainly due to the excess of births over deaths, the migration balance for the year being small in relation to the total change. As compared with the average annual increase over the period 1946-51, the 1951-52 increment is smaller mainly as a result of the decline from the abnormally high annual number of births in the immediate post-war years. A larger outward migration balance also contributed to the reduction but this was more than offset by lower than average mortality.

The Structure of the Population.—The proportions of the total population in broad age groups, in 1939 and 1952 are shown in the following statement. The development of the ageing process resulting from the decline from the high fertility of the late nineteenth century is illustrated by the progressive increase in the proportion in the 65 and over age group. In 1901, when the population structure had been rendered youthful by the antecedent period of high fertility, this proportion was only 47 per thousand. By 1939 it had increased to 89 and in 1952 it was estimated to be 111 per thousand. Between 1939 and 1952 the total proportion in the working age group 15-64 decreased from 701 to 667 per thousand and this segment of the population as a whole aged, the proportion over 45 having increased while the proportion under that age decreased. The proportion of children was higher in 1952 than in 1939 as a result of the high birth rates of the immediate postwar years.

Sex-age Group	Per thousand of Total Population	
	1939	1952
Under 15, Males and Females	210	222
15–44 Males	234	211
15–44 Females	241	213
45–64 Males	104	113
45–64 Females	122	130
65 and over, Males and Females	89	111
Total	1,000	1,000

The following summary shows the changes which have taken place in sex ratios at different ages. The ratio of females to males in the total population of all ages is not different from that of 1939 but the excess of females is confined to the higher ages.

Females per 100 Males

Mid-year	All ages	Under 15	15–24	25–34	35–44	45–64	65 and over
1939	107	98	98	102	110	117	134
1952	107	96	99	101	103	115	146

Factors contributing to this change are the smaller war losses in 1939-45 as compared with those in 1914-18, and the reduction in the volume of predominantly male net emigration after World War I. The rise in the sex ratio at birth and the decline in child mortality have also played a part. The increase in

the excess of females at ages 65 and over is due partly to the fact that the generations most depleted of males by the 1914-18 war losses and by the heavy emigration before 1914 have now moved into this age-group, and partly to the greater improvement in the longevity of females as compared with males.

Marital Condition.—Estimates of the population at mid-1952 by marital condition as revised* following the final tabulations of the census are shown in Table IV.

Table IV.—Estimated Total Population by Sex, Age and Marital Condition, England and Wales, Mid-1952

Note—This is a revised estimate based upon the final data by sex and age from the 1951 census.

(*Thousands*)

Age Group	Persons	Males				Females			
	All Conditions	All Conditions	Single	Married	Widowed and Divorced	All Conditions	Single	Married	Widowed and Divorced
0– ..	3,505	1,794	1,794	—	—	1,711	1,711	—	—
5– ..	3,492	1,787	1,787	—	—	1,705	1,705	—	—
10– ..	2,809	1,429	1,429	—	—	1,380	1,380	—	—
15– ..	2,761	1,393	1,386	7	—	1,368	1,310	58	—
20– ..	2,955	1,484	1,136	346	2	1,471	748	720	3
25– ..	3,182	1,592	552	1,032	8	1,590	335	1,237	18
30– ..	3,233	1,603	297	1,287	19	1,630	227	1,361	42
35– ..	3,215	1,583	206	1,351	26	1,632	204	1,368	60
40– ..	3,356	1,659	176	1,450	33	1,697	226	1,390	81
45– ..	3,236	1,588	155	1,394	39	1,648	245	1,292	111
50– ..	2,873	1,361	119	1,192	50	1,512	225	1,121	166
55– ..	2,459	1,101	84	958	59	1,358	207	914	237
60– ..	2,168	949	72	794	83	1,219	190	705	324
65– ..	1,842	782	65	607	110	1,060	163	505	392
70– ..	1,445	595	50	410	135	850	134	314	402
75 and over	1,635	620	49	315	256	1,015	167	204	644
All Ages	**44,166**	**21,320**	**9,357**	**11,143**	**820**	**22,846**	**9,177**	**11,189**	**2,480**

The proportion married in the total population rose between 1939 and 1952 from 48 to 52 per cent among males and from 45 to 49 per cent among females. At ages 25-29 the proportions married have risen from 54 to 65 per cent among males and from 65 to 78 per cent among females. This striking change is a consequence of the high marriage rates of postwar years and a reduction in the average age at marriage—matters which are discussed in more detail on pages 41 to 43.

Estimates of married women by age and marriage duration are referred to in the fertility chapter, p. 23.

Local Populations

Estimates of the home populations of all boroughs, urban and rural districts in England and Wales as at the middle of 1952 are shown in Table 12 of Part I and Table E of Part II. The Appendices to Parts I and II give details of changes in boundary during the year.

* The 1951 mid-year estimate by marital condition was also revised and, as corrected, is shown in Appendix B Table I, page 253.

Since the National Register figures covered nearly 8 of the 12 months from mid-1951 to mid-1952, it was found possible to use them, with suitable modification, to derive estimates for the latter date from the mid-1951 figures based on the preliminary census results. Other data taken into account included the returns of the mass exchange of ration books and those of parliamentary electors.

The local estimates differ in character from census figures, since the latter relate to persons who happened to be enumerated in the local area at census date and the estimates relate to the resident population.

In using census figures as a base for local estimates the numbers enumerated in each area at census date are first converted to numbers of residents by adding those enumerated elsewhere in England and Wales who had stated as their usual residence an address in the area concerned, subtracting those enumerated in the area who had stated a usual residence address elsewhere in England and Wales,* and making some special adjustments. These last relate to certain classes of the population absent from their usual residence as defined for census purposes but from only part of whom statements to that effect had been obtained on the census schedules. The most important of these are members of residential schools and colleges absent on holiday, for whom the school or college address should have been given as that of usual residence, though in many cases the home address was given instead; and members of the Forces on leave from their stations, many of whom failed to record the station as the normal residence (occasionally larger numbers were absent from their stations on manoeuvres or at sea, in which case no usual residence statement would have been obtained on the schedules). These elements may be important in some rural areas where the school or service establishment accounts for an appreciable part of the local population.

Each census provides a new set of bench marks from which to project a new series of estimates. A detailed examination of the extent of the errors which had accumulated prior to the 1951 Census was given in the Text for 1951, (p. 15).

Local Age Distributions

The estimates of the home population by sex and age in Standard Regions, Conurbations and Density Aggregates shown in Tables 2 and A.4 have been derived from those for 1951, described in the Text Volume for that year (p. 17).

The estimates of the *number of children under* 15 *years of age*, previously made for all administrative areas, have had to be limited from 1952 onwards to Administrative Counties, County and Metropolitan Boroughs. This is a consequence of changes in the available ration book statistics, and in particular of the abolition of the special ration books formerly issued to children and young people between the ages of 5 and 18. The new estimates are mostly based, for children under 5, on the number of births in each area in the preceding 5 years, and for those aged 5-14, on the number of children of those ages on school registers, figures of which have been made available by the Ministry of Education. Both kinds of data are adjusted in the light of those available in 1951 from census and other sources. The estimates for 1952 have been published in the Registrar General's Quarterly Return No. 417 (1st Quarter of 1953), p. 35.

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* Persons with a usual residence outside England and Wales were thus, as in 1931, allocated to the area of enumeration. This is not only consistent with the procedure adopted for the national estimates, but also reflects the fact that areas where this element is numerically important are usually those permanently characterised by a considerable floating population of such visitors.

BIRTHS, FERTILITY AND REPRODUCTIVITY

Live Births

The number of live births occurring in 1952 numbered 673,735, compared with 677,529 in 1951. Until 1938, statistics of birth registrations only were available but in most years the numbers of occurrences and of registrations were not different for all practical purposes and the registrations of 1938, numbering 621,204 may be compared with the occurrences of 1951 and 1952. The births of 1952 represented a rate per 1,000 population of all ages of 15·3, compared with 15·4 in 1951 and 15·1 in 1938. [Tables B and C of Part II]. The similarity of these three rates gives no hint of the wide fluctuations through which the rate passed in the intervening years, but these were associated with the war, and have been discussed in detail in the Civil Texts of 1940-1945 and 1946-1950. It need be recorded only that the rate rose to a peak at 20·5 in 1947 declining sharply at first to 17·8 in 1948, and then more slowly to 16·7 in 1949, 15·8 in 1950, 15·4 in 1951 and 15·3 in 1952. The violent fluctuations associated with the war have therefore passed, and the birth rate is now subject to only small variation from year to year.

A similar situation exists in many other countries as is shown by Table Q, which compares the rates of European and some other countries during the last thirty years. In 1952, England and Wales had the lowest birth rate but one of all the countries in the table, Austria having the lowest in both 1951 and 1952. Crude birth rates however do not permit a true appreciation of current fertility trends and levels and a much more detailed analysis of the statistics is required.

Birth Rates per 1,000 Women aged 15-44

Since only a fraction of the population are capable of childbearing, it seems more appropriate to relate births not to the total population but to the child-bearing component only, for this purpose assumed to be composed of women of ages 15-44. As the proportion of these women in the total population has been decreasing for many years, the crude birth rate has been progressively reduced by the inclusion in the denominator of an increasing proportion of the population not at risk of childbearing. This does not apply in quite the same way to rates based on legitimate births and married women only owing to the rise in the proportion married (see pages 40 and 41).

Table V gives live birth rates per 1,000 women aged 15-44 [Table C, Part II] and the ratios of these rates to that of 1938. In census years the ratio standardised for age is also shown, i.e. after correcting for changes in age structure of women *within* the age group 15-44, though this is an unimportant correction and has little effect on the ratios.

In the left hand side of the table, giving rates for the average of 3 years round each census year since 1841, the highest rate is associated with 1871, a rate no less than two and a half times that of 1938. The rates then decline to 1931, when the rate was substantially the same as that of 1938.

Table V—Live Birth Rates per 1,000 Women aged 15-44, 1841 to 1952, England and Wales

Year	Live Births per 1,000 women aged 15-44	Ratio to 1938 (taken as 100)		Year	Live Births per 1,000 women aged 15–44	Ratio to 1938 (taken as 100)
		Direct (Unstandardized)	Standardized for age			
Long Range (3-year averages)				Individual Years or Annual Average		
1841 ...	148·3	238	—	1938 ...	62·2	100
1851 ...	149·8	241	—	1939–49 ...	71·5	115
1861 ...	151·1	243	—			
1871 ...	155·7	250	—	1946 ...	83·3	134
1881 ...	147·7	238	235	1947 ...	90·6	146
1891 ...	129·8	209	205	1948 ...	80·2	129
1901 ...	114·8	185	179	1949 ...	76·0	122
1911 ...	98·3	158	155	1950 ...	73·0	117
1921 ...	90·9	146	147	1951 ...	71·6	115
1931 ...	64·3	104	102	1952 ...	71·8	115
1951 ...	72·1	116	117			

After 1931 the rate declined slowly to 59·4 in 1933, or 95 per cent of the 1938 rate, and then rose slightly to 62·2 in 1938. The rise from 1933 to 1938 was itself small, but that the rate should have remained so nearly constant for almost a decennium from 1931 to 1938, after a steep decline prolonged for no less than sixty years, was highly significant. From the figures shown in Table V above, it would appear that the decline was first retarded in the decennium 1911-1921 but in fact this was due to the exceptionally high birth rate in 1921—the making good of postponed births after the war of 1914-18. The underlying trend was still downward.

The intervention of war again in 1939 produced fluctuations in the rate, and the long term trend has been made clearer by aggregating the experience of the war and post-war years to yield an average rate of 71·5 for the period 1939-1949 as a whole, or 15 per cent higher than the 1938 rate. The rate for 1950 was very slightly higher than this at 73·0 but the rates for 1951 and 1952, 71·6 and 71·8, are close to the 1939-1949 average.

Now that the fertility disturbances associated with the Second World War have passed it is possible to see that the long decline in fertility prior to the early thirties has not been resumed; the average rate since 1938 is, in fact, higher than that of the previous decade.

Crude birth rates which take no account of the declining proportion of the population represented by women of the reproductive ages, would suggest that current experience was similar to that of pre-war years. When births are related to women of reproductive ages, however, it becomes clear that fertility in 1952 was 15 per cent higher than in 1938.

Age Standardisation

A further refinement may be introduced into the analysis by recognising that the fertility of women varies with age between 15 and 45. Since only a small proportion of girls under 20 are married their birth rate is low, but otherwise the rates are higher at younger than at older ages. The ageing of the population has added weight to the older groups and has tended to reduce the average fertility of the age-group 15-44 taken as a whole.

The left hand section of Table V, giving 3 year averages around census years, shows both unstandardised and standardised ratios of the rate to that of 1938. As at 1881 the effect of this standardisation was to reduce the ratio from 238 to 235 and, for 1931, from 104 to 102. At 1951 however the effect was to increase the ratio, from 116 to 117. Thus the improvement from 1931 to 1951 is only 12 per cent as shown by the unstandardised ratio, but 15 per cent as shown by the standardised ratio. While these adjustments are shown for completeness it is nevertheless obvious that the general trend of the fertility rates is not affected to any significant extent by age standardisation.

Reproduction Rates

A matter of public concern is whether the births currently occurring are sufficient to ensure the maintenance of the population at its present level. Unless in the long run deaths are replaced by births (or by an inward migration balance) the size of the population must change; and attention has become focused upon replacement. The concept of replacement was developed to the more specific point of considering whether a generation of women in passing through the reproductive years of life might bear sufficient female babies to replace themselves and thus to enable the same cycle of replacement to continue. (The same concept can of course be applied to the replacement of the male).

A simple index can be obtained by calculating fertility rates based on female births at each age (in practice in quinary groups) and adding these together to estimate the average number of female babies born to women passing through the reproductive ages assuming they experience these fertility rates—this is the Gross Reproduction Rate (G.R.R.). This takes no account of the mortality of infants before they themselves become the parents they are supposed to replace. Therefore before the rates for each age group are added together they should each be multiplied by the appropriate proportion of infants surviving to that age group. If this calculation is made on the basis of current mortality experience, it yields the Net Reproduction Rate (N.R.R.). Forecast mortality may be employed to allow for improvement in survivorship in the successive generations; the rate is then referred to as an Effective Reproduction Rate. It was shown in the Text for 1951, page 22, that the current level of mortality at young ages in England and Wales is so low that the effect of using forecast mortality would be trivial. If mortality were to be entirely eradicated in women under the age of 45 the Net Reproduction Rate would only be increased by about 5 per cent.

These reproduction rates suffer from a number of statistical defects but there is an overriding difficulty of interpretation which has tended to bring them into disrepute. Exact replacement is only indicated if rates of unity are consistently yielded and if the assumed conditions of mortality and age variations in fertility are reproduced in the future. In turn this involves other assumptions of stability in marriage experience, in the sex ratio at birth and birth spacing. These conditions are never fulfilled. The rate is a convenient method of summarising the experience of a single calendar year but this is an experience to which a number of separate generations of women contribute and in so far as these generations are already at different stages in their childbearing career the probable outcome in relation to the separate generations is obscured. Replacement cannot therefore be properly assessed by reproduction rates. Even a series of rates indicates only past trends and gives no reliable guide to the future in which rapid changes in conditions might take place. The rates are likely to undergo fluctuation from year to year and may even be subject to movement persisting over a period of years without providing a sure guide to ultimate population growth.

Approaches have been made to the problem of assessing replacement by measuring family sizes attained at different durations of marriage for couples married at different times in the past, or by calculating the ratio of successive generations. Though these are more satisfactory measures of replacement, they are by this same token retrospective measurements of past fertility in which current experience carries little weight.

Gross and Net Reproduction Rates for England and Wales are shown in Table VI.

Table VI.—Gross and Net Reproduction Rates, 1841 to 1952, England and Wales

Year	Reproduction Rates		Ratio to rate of 1938		Ratio of N.R.R. to G.R.R.
	G.R.R.	N.R.R.	G.R.R.	N.R.R.	
3-year Averages					
1841	2·237	1·349	2·494	1·676	0·603
1851	2·264	1·381	2·524	1·716	0·610
1861	2·277	1·427	2·538	1·773	0·627
1871	2·356	1·511	2·627	1·877	0·641
1881	2·252	1·511	2·511	1·877	0·671
1891	1·973	1·369	2·200	1·701	0·694
1901	1·702	1·238	1·897	1·538	0·727
Single Years					
1911	1·424	1·118	1·588	1·389	0·785
1922*	1·189	0·991	1·326	1·231	0·833
1931	0·922	0·801	1·028	0·995	0·869

Year	Reproduction Rates		Ratio to rate of 1938		Ratio of N.R.R. to G.R.R.
	G.R.R.	N.R.R.	G.R.R.	N.R.R.	
Single years					
1938	0·897	0·805	1·000	1·000	0·897
1939	0·892	0·807	0·994	1·002	0·905
1940	0·850	0·753	0·948	0·935	0·886
1941	0·836	0·737	0·932	0·916	0·882
1942	0·934	0·845	1·041	1·050	0·905
1943	0·985	0·893	1·098	1·109	0·907
1944	1·089	0·993	1·214	1·234	0·912
1945	0·992	0·910	1·106	1·130	0·917
1946	1·200	1·112	1·338	1·381	0·927
1947	1·307	1·214	1·457	1·508	0·929
1948	1·158	1·089	1·291	1·353	0·940
1949	1·098	1·037	1·224	1·288	0·944
1950	1·062	1·010	1·184	1·255	0·951
1951	1·044	0·996	1·164	1·237	0·954
1952	1·052	1·008	1·173	1·252	0·958

* 1922 has been selected since, as the aftermath of the First World War, conditions in 1921 were abnormal.

In view of what has been said about their defects it is perhaps best to regard these rates as having very much the same properties as annual birth rates and to consider them as such. The G.R.R. is superior to a crude birth rate since it relates births to the section of the population conventionally taken as responsible for them. Birth rates per 1,000 women aged 15-44, employed above, also possess this superiority, but the G.R.R. has a further advantage in that it is age standardised. The N.R.R. has both these properties, and in addition it incorporates an allowance for the wastage of mortality between birth and prospective motherhood.

The G.R.R. in 1841 was 2·237 and nearly 150 per cent above that of 1938. The close agreement between this excess and that shown in Table V will be noted. The rate at that time was rising slowly and, after passing a peak in 1871, commenced a long decline which was not arrested until after 1931, by which year it had fallen to 0·922. Between 1931 and 1938 there was little movement in the rate. The G.R.R. fluctuated widely in the next 11 years, as did more conventional birth rates, its average for the period 1939-49 being 1·031. Its value in 1951 was 1·044 and in 1952 was 1·052, reflecting relative stability as war disturbances receded.

The introduction of the element of mortality which has improved so much has an important effect on the shape of the long term changes. The N.R.R. in 1841 was 1·349, barely one half of the G.R.R. and only 68 per cent above the 1938 rate, showing that the contemporary high mortality losses between birth and attainment of reproductive ages were such that a much higher birth rate was required to replace the mothers of that time than was required in 1938. After 1841 the N.R.R. followed a course similar to that of the G.R.R., but with the rate of decline much retarded by the improving mortality. By 1931 the N.R.R. had fallen to 0·801, and in 1938 it was not significantly different at 0·805. The average N.R.R. for 1939-49 was 0·945. In 1951 the rate was ·996 and in 1952 1·008.

It is interesting to note the effect of mortality improvement since 1938. The average G.R.R. for 1939-49 was 15 per cent above 1938 whilst the average N.R.R. was 17 per cent above 1938. In 1952 the G.R.R. was 17 per cent above the 1938 level and the N.R.R. 25 per cent above. Thus, in addition to the improvement in fertility rates since 1938 (shown by the G.R.R.), the value of current births as contributing potential mothers is better by half as much again as a result of reduction in the mortality wastage between birth and reproductive ages.

The last column of the two halves of Table VI shows the ratio of the N.R.R. to the G.R.R., an index of the changes in mortality wastage discussed above. In 1841 nearly 40 per cent of the reproductive potential of girls was lost by their premature death. At the turn of the century, the loss was still over 25 per cent. In the next 30 years the loss was halved, falling from over 25 per cent to under 15. By 1938 the loss had been brought even lower to 10 per cent. Still further improvement in the following 14 years halved the losses again to under 5 per cent in 1952. Without resort to pessimism regarding future medical advances, it can be seen that further gains from mortality can be but slight, since the losses which can be removed are so small. Thus, whilst the mortality gains in the last hundred years have contributed much to maintaining replacement, little help can be expected in the future from this source, and another decline in fertility rates, such as that in the early years of this century could not take place without causing a decline in the N.R.R. to a level substantially below par. However, the fertility decline from the post-war peak has been shown to have been virtually arrested with the N.R.R. in the region of unity, and it remains for the records of the next few years to reveal the true post-war trend. It has to be borne in mind that the very youngest generations involved in the reproduction rate were married at earlier ages than the older generations and that to the extent that they will complete their family building earlier they will have lower fertility rates at older ages than are assumed in the reproduction rate. This means that the reproduction rate has been temporarily inflated by earlier marriages and true replacement may turn out to be appreciably below unity (Carrier N.H: *Population Studies*, Vol. IX, No. 1, 1955).

Age, Duration and Parity

Revision of Tabulation Design

As from 1952 a number of important changes have been made in the form of the tables in the Statistical Review which provide the annual fertility analyses based upon information obtained under the Population (Statistics) Act, 1938.

Tables AA to EE of Part II of the Review are, with a few modifications, similar to the corresponding tables in the previous series. Table FF (previously GG) now includes live and still birth rates per 1,000 legitimate maternities. Tables RR, SS and TT correspond to those previously designated VV, XX and YY. The former Table WW is discontinued.

A new Table (Table GG) shows birth rates by age of mother for Standard Regions, Conurbations and Density Aggregates; it also includes legitimacy, sex and stillbirth proportions which were formerly given in Table HH.

The analysis of legitimate maternities by mother's age, marriage duration and previous live-born children in Tables HH, II and LL, is confined to maternities to women married once only. This restriction was made necessary by the continued poor quality of data in respect of women married more than once. The 1952 records for almost a third of such women were incomplete in respect of one or more of the fertility particulars as compared with a trivial proportion (about $\frac{1}{2}$ per cent) of women married once only. The maternities excluded by this restriction are of marginal importance since they represent a very small

fraction of the total (about 3 per cent) and the small fertility differential associated with second and subsequent marriages has an insignificant effect upon the total national experience. Table MM relates to legitimate maternities to women married once only, distinguishing parity, age and year of marriage for successive marriage cohorts.

Tables JJ and NN show estimates of the numbers of married women (married once only) at risk of child bearing in the calendar year (*a*) according to age and duration of marriage and (*b*) according to age at marriage and year of marriage. There is a fundamental difference between the figures in these tables. Table JJ is required for the production of legitimate maternity rates per year of risk (shown in Table KK) and each married woman exposed to risk for a fraction of a year, only counts as this fraction. Table NN is required for the production of legitimate maternity rates per married woman (shown in Table OO, and subsequently accumulated to show average family size in Table PP) and each married woman exposed to risk at any time in the calendar year counts as a full unit.

In Tables AA, HH, II, LL and MM, the "not stated" cases have been proportionally distributed and included with the "stated" cases. Table QQ shows the numbers of cases so distributed and the proportions per 10,000 total legitimate maternities. Cases where the number of live born, now dead, children was not known by the informant at the registration of the birth have not been treated as "previous children not stated" since the current level of child mortality is sufficiently low to permit it to be assumed without risk of serious error that in these cases there were no such children.

A change has also been made in the method of identifying marriage duration in order to secure better correspondence with the completed month or year descriptions in the column headings of the tables, and the qualifications imposed prior to 1952, viz. that the actual durations were approximately half a month less than those indicated by the tables, is no longer operative.

Owing to the complexity of tabulations involving identification of legitimacy, age of mother, duration of marriage, number of previous children and various combinations of those factors, it is not practicable or economical to provide completely parallel classifications of both births and maternities. The tabulations provide full analyses by the two factors of legitimacy and mother's age for both births and maternities (Part II, Tables AA to FF and TT), but the legitimate fertility tabulations involving duration of marriage or number of previous children are restricted to maternities (Tables HH to OO and QQ). Maternities are slightly greater in number than the corresponding number of live births (stillbirths included in the former being in excess of the plural births excluded) but the excess is small and the maternity tabulations can be converted to live birth tabulations with sufficient accuracy for most purposes by the application of the appropriate live birth-maternity ratios. Ratios for 1938 to 1951 have been shown in previous texts, and for 1952 are shown below in Table VII.

Table VII.—Ratio of Legitimate Live Births to Legitimate Maternities by Mother's Age at Maternity, 1952, England and Wales

Calendar Year	Mother's Age at Maternity						
	All ages	Under 20	20–	25–	30–	35–	40 & over
1952	0·990	0·987	0·991	0·993	0·992	0·985	0·965

Incomplete Statement at Registration

The records of successive years have been subject to varying degrees of incompleteness through the occasional failure to obtain at birth registration a record of the mother's age, duration of marriage, or the number of her previous children. The proportion of "not stated" cases of various types in the records for the year 1938, the first of the series, and for the years 1945 to 1952 are given in Table VIII.

Table VIII.—"Not Stated" cases per 10,000 Total Legitimate Maternities 1938 and 1945 to 1952, England and Wales

Type of information not stated	1938	1945	1946	1947	1948	1949	1950	1951	1952*
Age only	21	20	20	19	17	19	18	16	14
Age and duration	5	3	3	3	2	2	2	2	5
Age and children	—	—	—	—	—	—	—	—	—
Age, duration and children ...	25	11	10	13	8	6	6	6	—
Duration only	89	40	41	34	27	22	20	24	32
Children only	44	32	25	30	27	24	20	19	—
Duration and children	7	6	7	3	3	4	3	3	—
Total, all types	190	112	106	102	84	77	70	70	51
All age types	51	34	33	35	27	28	26	24	19
All duration types	125	60	61	53	39	34	31	35	37
All children types	76	50	42	46	38	34	29	28	—

* For the year 1952 the figures relate to women married *once only*.

In 1938, the first year of the operation of the Population (Statistics) Act, the additional information required by that Act was deficient in one form or another in 1·9 per cent of total legitimate registrations, but by 1951 the deficiency had fallen to 0·7 per cent. Restricting the tabulations in 1952 to women married once only can be seen to have had the effect of reducing the deficiency still further to 0·5 per cent. The date of marriage, from which the duration of marriage is obtained, has been the most frequent item of information omitted but such omissions have become much less frequent of recent years, falling from 125 per 10,000 legitimate maternities in 1938 to only 37 per 10,000 in 1952.

The number of previous children was omitted for 76 per 10,000 legitimate maternities in 1938, but the proportion had fallen to 28 in 1951 and in 1952 for women married once only there were effectively no omissions. The frequency of omission of mother's age was 51 per 10,000 in 1938, but only 24 in 1951 on the old tabulation basis and 19 in 1952 on the new.

There is no reason to suppose that the omissions were generally intentional or prejudiced and therefore as already stated above it has been considered justifiable to incorporate in tables AA, HH, II, LL and MM a proportional distribution of the "not stated" amongst the "stated" cases as being from the users' point of view, the more convenient form of presentation.

Illegitimate Births and Pre-marital Conceptions

Of the 673,735 live births which occurred in 1952, 32,549 or 4·8 per cent were registered as illegitimate compared with an average of 5·4 per cent in the post-war years from 1946 to 1951, an average of 6·2 per cent over the war period 1939-1945, and an average of 4·2 per cent in the pre-war years from 1935 to 1938. The proportion of births that were illegitimate, after having been stable

for many years, rose during the war to some 50 per cent above the pre-war level. Since the war the proportion has declined, but in 1952 it was still 14 per cent above the pre-war figure.

In terms of the numbers of single, widowed and divorced women aged 15 to 44 in the population, the illegitimate birth rates, which had fallen from over 18 per 1,000 related women in the middle of the nineteenth century to 8·4 in 1901-1905 and 5·5 in 1931-1935, rose from the outbreak of war to a peak of 16·1 in 1945. It has declined since to 9·8 in 1951 and rose only slightly to 10·0 in 1952. Expressed in this form, the incidence of illegitimacy in 1952 was more than 80 per cent above that of pre-war years. The reason for the wide discrepancy between the impression given by these two alternative measures is that the high marriage rates of recent years have depleted the population of the non-married. The incidence of illegitimate births relative to legitimate births should therefore have fallen sharply, and that it has not done so implies a much increased rate of illegitimate births per 1,000 non-married women. The choice of measure has to be decided on grounds of convenience. Neither can be strictly justified since illegitimacy is not necessarily geared to legitimate fertility or related to *all* non-married women.

The numbers of illegitimate births registered from 1851 are published in Table B of Part II and rates in Table C.

Attention has been drawn in previous commentaries to the fact that legitimate but pre-maritally conceived births and illegitimate births are complementary from the aspect of extra-marital sexual behaviour, and should be considered together. Tabulations of legitimate births by duration of marriage are not made, but tabulations of maternities are available and enable the necessary statistical analysis to be carried out. For 1952 the number of maternities occurring within 9 months of marriage are taken to indicate the number pre-maritally conceived. Prior to 1952 for convenience of tabulation it was considered permissible to take the dividing line at approximately $8\frac{1}{2}$ months.

Table IX shows the numbers of illegitimate and pre-maritally conceived maternities for each year from 1938 (when tabulations by duration of marriage were first made) to 1952. (The 1952 figure in column (3) is comparable with those for previous years in so far that it relates to pre-maritally conceived legitimate maternities of all marriages.) As an indication of the effect of the change in duration tabulation in 1952 it may be stated that on the new basis the 1951 percentage in column (5) would be raised from 12·3 to 13·0 by the addition of one half month's maternities.

It has been pointed out in previous commentaries that, as the incidence of illegitimate maternities increased at the onset of war [shown in column (2) of the table], the incidence of pre-maritally conceived legitimate maternities decreased [shown in column (3)], and the sum of the two [shown in column (4)] suffered much less fluctuation than either of its components. It is likely that physical separation and other disturbances of the war prevented or militated against the marriage of the couple after conception but before the birth and produced an apparent shift of a substantial number of maternities from the pre-maritally conceived legitimate category to the illegitimate category during war and immediate post-war years. It therefore seemed reasonable to expect that, when war conditions passed, a return would be made to the pre-war pattern. From column (6), which shows the proportion of extra-marital conceptions followed by the marriage of the parents before the birth of the child, it may be seen, however, that the proportion was steady at 70 per cent before the war, and that after the war-time disturbance had passed it settled in 1948 at 60 per cent. It was shown in the Text for 1951, page 27, that this difference in levels was mainly due to considerable reductions in the proportions at ages above 20, especially at ages 25-34.

Table IX.—Illegitimate Maternities and Pre-maritally conceived legitimate maternities, 1938 to 1952, England and Wales

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities	Total maternities conceived extra-maritally		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Per cent of all maternities	
1	2	3	4	5	6
1938	28,160	66,221	94,381	14·6	70·2
1939	26,569	60,346	86,915	13·8	69·4
1940	26,574	56,644	83,218	13·7	68·1
1941	32,179	43,362	75,541	12·7	57·4
1942	37,597	40,705	78,302	11·8	52·0
1943	44,881	37,271	82,152	11·8	45·4
1944	56,477	37,746	94,223	12·3	40·1
1945	64,743	38,176	102,919	14·9	37·1
1946	55,138	43,488	98,626	11·8	44·1
1947	47,491	59,633	107,124	12·0	55·7
1948	42,402	62,304	104,706	13·4	59·5
1949	37,554	59,185	96,739	13·1	61·2
1950	35,816	54,188	90,004	12·8	60·2
1951	33,444	50,477	83,921	12·3	60·1
1952	33,088	50,721	83,809	12·3	60·5

Table X.—Extra-maritally conceived maternities per 1,000 unmarried females, 1938 to 1952, England and Wales

Age of mother	1938	1939	1940–1945 Average	1946	1947	1948	1949	1950	1951	1951 Adjusted (on 1952 duration basis)	1952
15–	12·0	12·1	11·1	11·4	12·6	14·3	15·5	15·2	14·6	15·0	15·1
20–	37·1	36·5	36·5	42·3	49·7	50·8	47·4	44·7	42·8	46·3	46·4
25–	27·6	26·6	35·0	44·3	50·6	47·5	40·9	41·4	38·7	41·6	39·1
30–	16·0	15·8	23·5	33·6	35·3	33·4	32·7	29·7	30·6	32·1	28·5
35–	10·6	10·0	13·0	17·9	18·9	18·5	18·1	17·6	17·0	17·5	16·2
40–44 ...	4·2	4·0	5·2	6·0	6·2	6·0	5·8	5·4	5·7	5·8	5·3
15–44 ...	19·8	19·0	20·9	25·0	28·1	28·3	26·8	25·6	24·7	26·2	25·4
Ratio to 1938:											
Crude ...	1·00	0·96	1·05	1·26	1·41	1·42	1·35	1·29	1·25	1·32	1·28
Age Standardised	1·00	0·98	1·07	1·28	1·45	1·46	1·39	1·34	1·29	1·36	1·33

Extra-maritally conceived maternities related to the population at risk, viz: unmarried females, are shown in Table X with distinction of mother's age. To facilitate the comparison of the 1952 rates with those of previous years, an additional column for 1951 has been provided showing the rates that would have been produced in that year if the duration tabulations had been on the revised basis adopted in 1952.

The highest rates are for women aged 20-24 and 25-29. Before the war the highest rate was clearly that of the 20-24 age group, but since the war the difference between this and the succeeding age group has narrowed considerably, indeed in 1946 and 1947 the rate was actually higher in the older of the two groups.

The increases in the rates at ages over 30 as compared with 1938, although considerable, are not as important, from the point of view of the resulting increase in the numbers of extra-maritally conceived maternities, as the much smaller increases at the younger ages, the assumed population at risk at ages over 30 being only some 25 per cent of the total aged 15-44. (As has been remarked earlier the population actually at risk depends on factors other than age and marital condition).

In 1952 68 per cent of the illegitimate and 94 per cent of the legitimate extra-marital maternities, i.e. a total of 84 per cent of all pre-marital conceptions, related to mothers under the age of 30.

Legitimate Births and Fertility

Of the total live births which occurred in 1952, 641,186 were registered as legitimate, compared with 766,800, 834,423, 733,732, 693,611, 661,847 and 644,758 in the post-war years 1946 to 1951 respectively, and 594,825 in the last pre-war year, 1938. Since the post-war peak year of 1947, the number of legitimate live births has declined each year, but by a progressively decreasing amount. The legitimate live births in 1948 numbered 101,000 less than those in the previous year, in 1949 they were 40,000 less, in 1950 32,000 less, in 1951 17,000 less and in 1952 4,000 less. The inevitable decline from the artificially inflated birth incidence of 1947 has been completed and a period of relative stability seems to have been reached.

The purpose of this section, however, is not merely to confirm the broad trend of fertility, already indicated in earlier paragraphs, but to bring into relief some features of fertility experience which are relevant only to married women and for whom alone the essential statistics are available. It is important to emphasise again that too much should not be read into the apparent stabilisation of the annual number of legitimate live births above that of 1938, since there have been sharp and non-recurring changes in the associated population at risk in consequence of the new post-war pattern of the marriage experience.

It is customary to relate child-bearing to women of ages 15-44, and legitimate births to the married women within these ages. Owing to the very high marriage rates of the last 15 years, to which attention is drawn in the marriage section of this commentary, the number of married women aged 15-44 in the population is higher than ever before, although the number of women of all marital conditions of these ages has been declining, as the following summary statement shows:

	Women enumerated aged 15–44		
	All marital conditions (thousands)	Married (thousands)	Proportion married
1931 Census	9,825	4,917	50 per cent
1951 Census	9,486	6,135	65 per cent

Thus the current legitimate live birth experience, when related to the number of married women at risk, as in the following statement extracted from Table C of Part II, compares less favourably with similar rates for the pre-war period, than do rates based upon all births and all women without regard to marital condition.

Year	1938	1946	1947	1948	1949	1950	1951	1952
Legitimate live birth rate per 1,000 married women aged 15–44	110·0	128·7	139·7	121·7	114·4	108·6	105·4	104·5

The rate, though recently falling more slowly than immediately after the peak year of 1947, has nevertheless declined to 5 per cent below the level of 1938.

The analysis of legitimate fertility must take account of differences in birth rates of women of different ages (within the range 15-44) and of different durations of marriage.

It was pointed out in the Text for 1951 that married women under the age of 45 have been on the average younger since 1938, though the population of all women aged 15-44 (without distinction of marital condition) has been ageing during this period. The ageing of the population in general arises from the rapid decline in fertility in earlier years. The adolescent girls of today represent smaller generations than their mothers; the youthfulness exhibited by the *married* population means therefore that these younger generations are marrying at higher rates which more than counterbalance their smaller numbers in determining the replenishment of the population of married women.

It was also shown that while recent high marriages rates have increased the proportion of married women at short durations, most of these women, having been married at earlier average ages than women married in previous years, are not at shorter marriage durations than would be implied by their attained age. Any standardisation for comparison with an earlier experience, e.g. that of 1938, has to take full account not only of the fact that young women by virtue of their youth can only have been married for a short time, but also for the earlier age at marriage of those of a particular attained age, i.e. for the fact that the lower average age of recent marriages means that at present ages the married women of today have been married *longer* than women of the same ages in 1938.

After standardising for age and duration, the 1951 rate was only 3·7 per cent below that of 1938 while the crude rate was 4·4 per cent lower. This small difference was held to demonstrate that the sharp changes in marriage experience had not produced any temporary artificial inflation of the birth rate; but that on the contrary the crude rate had been slightly deflated.

The same standardisation is not appropriate to 1952 because the available durational tabulations relate to women married once only and this restriction increases the average duration of the older women while at the same time reducing the average age of total women at risk; the net result being to deflate the crude fertility rate still further. For proper time comparisons it will be necessary to build up a new series of figures based upon women married once only.

The crude rate of 104·5 per 1,000 for 1952 relates to all married women aged 15-44. It is only slightly below that for 1951 and though 5 per cent below 1938 it has been depressed by recent marriage experience. The picture is still of comparative stability.

Legitimate Fertility by Mother's Age and Duration of Marriage

Legitimate maternities at successive marriage durations are classified by individual ages of the mother in Table 00 of Part II of each year up to 1951 and from 1952 in Table II, which refers to women married once only. The corresponding maternities of all married women for 1938-1945 were shown in Table IV of Appendix I on page 168 of the 1940-45 Civil Text, and for 1946-1950 in Table 4 of Appendix II on page 188 of the 1946-50 Civil Text.

Annual rates corresponding to the maternities are shown in Table KK and have been obtained by relating them to the estimated years of married life exposed to risk, the calculation of which was described in Appendix II of the 1940-45 Civil Text. Similar annual rates (subject to tabulation changes) for 1938-1945 appeared in Table V of Appendix I on page 172 of the 1940-45 Civil Text and for 1946-1950 in Table 5 of Appendix II on page 192 of the 1946-50 Civil Text. It should be noted that a maternity rate expressed per year of married life may be regarded as equivalent to the annual rate per married woman. The rates shown are maternity rates and to obtain equivalent birth rates they should be multiplied by the appropriate ratios of births to maternities.

Analysis by Age.—Table XI shows the numbers of legitimate maternities by mother's age at maternity, for the pre-war year 1938, the average annual numbers for the period 1939-1949 covering the war time disturbance and post-war recovery, and for each individual year from 1946 to 1952. In the lower part of the table is shown the distribution of these maternities per thousand total over the six quinary age groups of mothers between 15 and 45 (the few cases at ages over 45 being included in the final group.)

Table XI.—Distribution of Legitimate Maternities by Mother's Age, 1938 to 1952, England and Wales

Mother's age	1938	Average 1939–49	1946	1947	1948	1949	1950	1951	1952
	Total number of maternities (in hundreds)								
	610,7	674,7	777,6	844,0	741,5	700,5	668,3	651,0	647,6
	Age distribution per 1,000 total								
15– ...	36	31	23	27	34	38	39	38	38
20– ...	233	248	231	255	268	274	272	275	280
25– ...	324	309	304	321	325	338	332	327	322
30– ...	237	232	253	225	204	190	199	208	216
35– ...	126	135	146	132	128	121	120	115	108
40 and over	44	45	43	40	41	39	38	37	36

Throughout the period the largest proportion (about one third) of maternities occurred to mothers between the ages of 25 and 30, but the distributions are not sharply peaked and proportions not very much smaller in size were associated with mothers in the immediately older and younger age groups. Altogether the maternities between ages 20 and 35 have accounted for about 80 per cent of the total in each period shown in the table. During the war and immediate

post-war years there were two main changes in the distribution—a shift to the older mothers, whose lives were less disturbed by the war, and a rise in the proportion at age 20-24 following the large increase in numbers of young brides in 1939 and 1940. This was followed by a complementary and temporary shift to the younger ages, where the greater degree of war separation implied postponed births. More recently the continued high incidence of marriages at young ages has tended to maintain the preponderance at the younger ages, with an average age of mothers younger than in 1938.

In Table XII these maternities are related to the women at risk in the form of rates per 1,000 married women at each age in each calendar year.

Table XII.—Legitimate Maternity Rates by Age, 1938 to 1952, England and Wales

Mother's age	1938	1939–40	1946	1947	1948	1949	1950	1951	1952
	Maternity rates per 1,000 married women								
15– ...	550	371	348	469	468	472	461	424	420
20– ...	272	246	252	310	284	270	255	254	252
25– ...	175	176	210	228	191	182	173	169	169
30– ...	112	116	143	142	119	109	106	104	103
35– ...	61	67	81	79	67	60	57	53	51
40– ...	23	23	26	26	23	20	19	17	17
15–44 ...	113	114	131	141	123	116	110	106	106

In every period shown in the table, the rates decline with age, at first sharply and thereafter more slowly.

The crude maternity rates in 1952 are lower than those of 1938 at every age though much less so at the central ages where most of the maternities are concentrated than at the extremes. When changes in marriage duration are borne in mind it is even more evident that between the ages 20 and 35, there is very little difference between the rates for 1938 and 1952, the decline being mainly confined to the very young or to the much older women.

As far as the older women are concerned, women over age 35 will in general have been married for several years. The rates they had experienced on average in 1939-49 when some 5 to 10 years younger than their 1951 age may be seen to have been above the 1938 rates. Thus the subsequent decline does not necessarily suggest that they will ultimately have smaller families than generations of some 10 to 15 years earlier.

The decline at the youngest age group which contributes only 4 per cent of all maternities is more than accounted for by a reduction in pre-marital conceptions. For example in 1938, of 21,878 legitimate maternities to mothers under age 20, 15,513 or 70·9 per cent had been pre-maritally conceived. The similar figures for 1952 were 14,765 out of 24,349 or 60·6 per cent. If the post-maritally conceived element in 1952 had remained the same (9,584) but the pre-maritally conceived element had increased to form the same proportion of the whole as in 1938, there would have been an additional 8,586 maternities to this age group in 1952, increasing the maternity rate to 3·3 per cent above the 1938 rate.

Analysis by Duration of Marriage.—The distribution of legitimate maternities according to marriage duration* is shown for 1938,1939-49, and the individual years 1946 to 1952 in Table XIII.

*Up to 1951 durations shown in years, e.g. 1–, 2–, etc. should be read as strictly meaning 11½ months–1 year 11½ months, 1 year 11½ months–2 years 11½ months, etc. From 1952 the initial interval is 9 months and the remaining intervals may be taken at face value.

The adjusted column for 1951 indicates the effect of the shift of one half a month in duration tabulation introduced in 1952.

Table XIII.—Distribution of Legitimate Maternities by Marriage Duration, 1938 to 1952, England and Wales

Marriage duration	1938	Average 1939–49	1946	1947	1948	1949	1950	1951	1951 Adjusted (on 1952 duration basis) *	1952* (married once only)
Pre-maritally conceived per 1,000 total legitimate maternities of each year										
0–8½ months ..	106	73	56	71	84	84	81	78	86	81
Distribution per 1,000 total conceived after marriage in each year										
8½–11½ months ..	60	60	61	69	74	63	62	60	60	61
1– year	154	149	123	152	159	167	155	150	148	141
2– years	122	112	78	95	120	125	127	122	122	120
3– years	104	96	77	73	86	107	109	114	114	110
4– years	88	85	89	77	65	77	96	99	100	101
5–6 years	131	146	197	166	135	119	117	141	141	156
7–9 years	138	152	169	180	177	166	146	124	125	120
10 years and over ..	203	200	206	188	184	176	188	190	190	191

* Subject also to the change in duration interval referred to on page 24.

The most striking change shown by this arrangement of the data is that for the first duration identified, namely that adopted as encompassing the incidence of pre-maritally conceived maternities. In 1938 these maternities accounted for 106 per 1,000 of the total legitimate maternities recorded. The proportion fell rapidly during the war and then rose but it has never regained its pre-war value. The 1952 proportion is not strictly comparable with those of previous years owing to the additional one half-month's maternities and the restriction to women married once only. If this difference is taken into account by reference to the adjusted proportion for 1951, it seems that the slight downward trend noted since 1949 has continued though the movement is small and the general level is still at about 80 per thousand.

To avoid the influence of these pre-marital conceptions upon the distributions of later durations, the proportions for the latter in the lower part of Table XIII are shown per 1,000 conceived after marriage. War conditions encourage the postponement of births, but in a distribution of maternities by duration of marriage neither the aggregation of the experiences of the war and immediate post-war years nor any other simple expedient can eliminate or effectively mitigate the abnormality of the period, as has been done in the previous sections, because the postponement is not merely to a later year but to a later duration. A second factor influencing the incidence of maternities by duration has been the wide fluctuations in marriage rates, leading to corresponding fluctuations in the numbers of mothers at risk at the various durations; and the effects of this second factor have not yet been exhausted. Thus the fact that a shift of incidence from shorter to longer durations may be seen from Table XIII to be the current trend, must not be taken to be an indication of a change in family spacing; it is associated with a parallel shift in distribution of married women at risk. The effect of the changing distribution of the numbers at risk is removed in Table XIV where the numbers of maternities at each marriage duration are expressed as a rate per 1,000 married women aged 15-44 passing through the duration specified.

Table XIV.—Legitimate Maternity Rates by Duration of Marriage, 1938 to 1952, England and Wales

	1938	Average 1939–49	1946	1947	1948	1949	1950	1951	1951 Adjusted (on 1952 duration basis)	1952* (married once only)
	Rates per 1,000 Married Women aged 15-44 at each duration									
0–8½ months ..	187	135	117	159	162	164	158	151	167	167
8½–11½ months ..	98	104	120	151	130	110	109	108	108	113
1 year	244	258	283	332	295	283	266	266	262	265
2 years	203	200	213	242	230	222	209	209	207	224
3 years	177	175	194	218	193	197	189	186	184	198
4 years	156	160	189	213	173	167	172	171	170	176
5 years	138	147	182	196	162	148	143	149	148	155
6 years	119	136	175	176	143	146	123	120	119	131
7 years	105	120	154	155	126	118	114	103	102	111
8 years	94	103	132	132	111	95	98	94	94	91
9 years	81	91	115	114	96	87	84	81	80	83
10 years and over ..	46	48	57	55	46	41	40	38	38	37
All durations ..	113	115	131	141	123	116	110	106	106	107
All durations from 8½ months	106	111	129	137	118	110	105	102	101	102

* Subject also to the change in duration interval referred to on page 24.

Disregarding the rate at under 8½ (9) months duration, associated with pre-marital conceptions, and remembering that each married woman is only exposed for a quarter of a year to the risk of maternity at durations 8½-11½ (9-12) months, it may be seen that in every period considered the rates decline with lengthening duration, at first steeply and thereafter more gradually.

Apart from the reduced incidence of pre-marital conceptions which has been referred to already, the 1952 rates are higher than those of 1938 at short durations and lower at durations longer than 8 years. In general the 1952 rates (though not strictly comparable) indicate only small changes from those of 1951; the rates are almost equivalent in the first two years, there is a slight rise at durations between 2 and 8 years and on the whole a slight fall at durations of 8 years and above.

Analysis by Age and Duration Combined.—The analyses so far examined show that fertility declines with advancing age of mother and also with lengthening duration of marriage, when these factors are considered separately, but to what extent either or both are responsible for the decline is not clear, since the shorter durations tend to be associated with the younger mothers and the longer durations with the older mothers, and arrangements of the data by either factor alone automatically reflect the influence of the other. For an appreciation of the separate and independent effects of these factors, tabulations of birth or maternity rates are required in which distinction is made simultaneously of age of mother and duration of marriage. Such tabulations of maternity rates for each year from 1938 to 1945 were shown in Table V of Appendix I of the Civil Text for 1940-45 on pages 172-174; for each year from 1946 to 1950 in Table 5 of Appendix II of the Civil Text for 1946-1950 on pages 192-194; and for 1951 are shown in Table 3 of Appendix B of the 1951 Text volume on page 300. Rates (per year of risk) for 1952 are given in Table KK of the Civil Tables, for women married once only.

The rates for 1952 conform generally to the pattern of earlier years. At each duration the rates decline, more or less consistently, with increasing age of mother; and, at each age of mother, after rising to a maximum in the second year of marriage (except in those under age 20 where pre-marital conceptions are relatively more numerous), they decline with lengthening duration of marriage.

The rates at durations under 9 months, conventionally attributed to pre-marital conceptions, may be seen to share with those at other durations the property of declining with age. The decline from the rate for mothers under age 20 to that of next older group 20-24, is very steep, the latter rate being only some 40 per cent of the former, but thereafter the decline continues more gradually. The 1952 rates do not indicate that the downward trend at all ages which was noted in 1951 has continued to any significant degree.

Excluding pre-marital conceptions (and allowing for the shift in duration in the 1952 tabulation), the rates of 1952 (as suggested by the all-age analysis of Table XIV) are generally slightly higher than those of 1951 at durations between 2 and 8 years and the rates for longer durations tend to show a falling trend. This is consistent with the suggestion that there is a current tendency to concentrate family building in the early years of married life to a greater degree than formerly. In the first two years of marriage the rates are higher at the older ages but this is probably due to the exclusion in 1952 of women married more than once.

Cohort Analysis.—In considering replacement, the total ultimate size of family produced by each married woman is of more interest than the rate at which she may be building her family at any particular time. Maternity rates may be calculated each year and aggregated from year to year to show the average total number of maternities experienced by married women over the whole of various durations of marriage, i.e. effectively to trace their family building as they pass through their reproductive married lives.

During their married lives, women pass not only through successive durations of marriage, but simultaneously through successive ages. Thus, for example, the maternity rates in 1946 at duration 0- at maternal age 20-24, and in 1947 at duration 1- and age 21-25 are both representative of a group of women married at about the same time and at the same ages, i.e. they belong to the same marriage cohort*—though a somewhat theoretical cohort—and they may be aggregated to show the average number of maternities experienced by the cohort by the end of its second year of married life. Similarly, the maternity rate in 1948 at duration 2- and age 22-26 may be added to the previous total to bring it up to the end of the third year of married life, and so on. If in place of maternity rates, rates based on legitimate live born children are used and are added to base-line data provided by census material, estimates are obtained of the family sizes (ignoring the factor of survival) at different durations of marriage and different attained ages of the various marriage cohorts who make up the current population of married women. Such estimates are shown in Table PP of the Statistical Review, Part II. The original base for this table was provided by the 1946 Family Census† to which was added registration statistics to the end of 1952. In order to focus attention on the marriage cohorts, the table is presented in a form which relates the family building to the women married in particular age groups and particular calendar years. It should be emphasised that these families are not, except for the older cohorts, complete; additions are still being made to those of the earliest cohorts and the table merely shows the average size obtained by the end of 1952.

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*The term cohort is used for convenience to refer to women married during the same interval of time.

†"The Trend and Pattern of Fertility in Great Britain"; D. V. Glass and E. Grebenik. H.M.S.O. 1954.

The following statement provides a comparison of average family sizes, in 1946 and 1952, at corresponding durations, derived from the report on the 1946 Family Census (Tables 67-72) and Table PP.

Average number of live born children

	Marriage duration (completed years)						
	5 years				9 years		
Year of marriage	1930	1940	1943	1947	1930	1940	1943
Age at Marriage							
under 20	1·62	1·20	1·35	1·65	2·31	1·97	2·04
20–24 ...	1·25	0·98	1·17	1·40	1·79	1·60	1·72
25–29 ...	1·00	0·87	1·07	1·31	1·42	1·39	1·52
30–34 ...	0·88	0·82	0·91	1·09	1·12	1·15	1·21
35–39 ...	0·60	0·53	0·56	0·69	0·68	0·62	0·66
40–44 ...	0·27	0·22	0·24	0·29	0·30	0·23	—
All ages at marriage ...	1·15	0·94	1·15	1·36	1·62	1·52	—

From this selection of the available figures it can be seen that the cohort of women married in 1930 at ages under 20 had an average of 1·62 live births by the end of 5 years of married life and 2·31 at the end of 9 years. Those married at the same ages at the beginning of the war and subject to considerable wartime separation had only 1·20 live births at the end of 5 years, but at the end of 9 years they had an average family size of 1·97, having made up some part of the gap between the two cohorts represented by births postponed by the war. For the cohorts married at ages 20-29, this making up at later durations of the difference between family sizes at earlier durations resulting from the war, is even more striking.

The 1943 cohorts at the end of 9 years of marriage had outstripped the family sizes of earlier cohorts for ages at marriage above 25 years, but for earlier marriage ages their attained family sizes, though higher than those of the 1940 cohort, were smaller than those of the 1930 cohort, whose 9 years of marriage entirely preceded the war and were free from the factors of separation and other war conditions which affected the later cohorts.

The latest cohorts shown, those married in 1947, have, at 5 years marriage duration, average family sizes considerably in excess of those produced at the end of 5 years by women married in 1930. The ultimate family size of these post-war cohorts will not be known for several years yet, and it is a matter for speculation whether their experience up to 1952 indicates that their ultimate family sizes will fall short of those required for the replacement of the generations of mothers who compose the marriage cohorts. On various assumptions, it was estimated, in the report of the Family Census, that the marriages of 1941-43 might achieve between 94 and 98 per cent replacement. (These are not limits but merely the range of rates obtained by the different combinations of assumptions used about marriage, illegitimacy and mortality). It is probable that at 5 years duration the 1947 cohort, freed from war disturbances and subject to the tendency to complete family building in the early years of married life, has completed a greater proportion of its total family building than the wartime cohorts, and that the increase in family size as compared with earlier cohorts will not be maintained at later durations, but it seems unlikely that, as compared with the 1943 cohort, a substantial deficiency will arise.

Summary

To sum up the fertility statistics of one year in a sentence is hazardous but it could be attempted by saying that a slight decline in the birth rate reflects only small changes in fertility rates at specific age and durations of marriage; that the tendency to concentrate family building in the earlier years of married life has continued; and that unless the tendency continues (as well it may) the prospects as yet discerned are of no substantial shortfall from replacement by the women married in recent years. The fertility statistics of the next few years will be crucial to deciding the probable trend.

First Maternities (Legitimate)

Of the 626,858 legitimate maternities to women married once only, in 1952 247,352 or 39·5 per cent had not had a previous live or stillborn child by their present husbands. The records for previous years include some women married more than once and are not strictly comparable but on the basis of the experience of all women the proportion was 42·9 per cent in 1938. After the decline in the war years, the proportion rose to a peak of 45·4 per cent in 1947 when birth incidence was at a maximum and thereafter declined.

The incidence of first born children is naturally at a maximum for recent marriages and thus the proportion of first maternities among all legitimate maternities will be raised immediately following a rise in marriage incidence. If distinction is made of mothers' ages, the proportion of first maternities will be highest at the youngest ages, again because their marriages will be comparatively recent. These effects are illustrated by Table XV. The proportion of first maternities declines steeply with advancing age in all years.

Table XV.—First Maternities to existing marriages per 1,000 total legitimate maternities at each age, 1938 to 1952, England and Wales

Mother's age	1938	Average 1939–49	1946	1947	1948	1949	1950	1951	1952*
All Ages ...	**429**	**433**	**431**	**454**	**426**	**410**	**393**	**388**	**395**
Under 20 ...	890	900	913	912	898	885	868	861	870
20– ...	644	683	701	710	666	635	613	609	618
25– ...	469	450	464	470	414	382	362	358	364
30– ...	296	285	287	293	259	243	234	228	215
35– ...	166	182	194	202	186	181	170	163	147
40 and over	95	119	130	143	142	140	136	137	109

* First maternities to women married once only.

The rise at the end of the war and the decline after 1947 in the proportion of first maternities amongst legitimate maternities of mothers of all ages, may also be seen in the first line of the table. A certain degree of stability seems to have been reached in recent years there being little movement in the proportion since 1950. In the separate age groups, also, a similar pattern is seen in general, with a peak in 1947 above the 1938 level and a subsequent decline, apparently exhausted, to below the 1938 level.

There have been changes in marriage and family building habits which will be reflected in the proportion of first maternities. The lowering of the average age at marriage, which should lower the proportion at all except the lowest ages, may in fact be the major cause of the proportions in 1950-52 being generally lower than in 1938. The decrease on the one hand in childlessness and on the other hand in the proportion of families of the larger sizes which appears to

have been taking place, will tend to offset to some extent the decline in the proportions of first maternities arising from the lowering of age at marriage. Changes in family spacing may also be reflected in movements in the proportions but it is not at present practicable to isolate such changes.

Family building tends to be concentrated in the few years immediately after marriage and the concentration will necessarily be accentuated when consideration is confined to first births or maternities. The extent of this concentration may be seen from Table XVI showing the numbers and distribution of first legitimate maternities by duration of marriage.

Table XVI.—Numbers and Distribution by Duration of Marriage of First Maternities by existing husbands to married women of all ages, 1938 to 1952, England and Wales

Calendar Year	Duration of Marriage*												All Durations
	0–8½ mths.	8½–11½ mths.	1– year	2– years	3– years	4– years	5– years	6– years	7– years	8– years	9– years	10+ years	
	Numbers (hundreds)												
1938 ..	63,2	32,0	70,6	35,4	21,7	13,5	8,0	5,3	3,6	2,7	1,8	4,1	261,9
1939–49†	48,3	37,3	80,7	40,1	25,1	17,7	13,0	9,6	6,4	4,2	2,9	6,5	291,8
1946 ..	43,0	44,6	81,4	34,2	26,2	27,9	24,9	22,2	9,8	6,3	4,7	9,7	334,8
1947 ..	58,9	53,2	106,4	44,0	24,4	23,0	22,2	17,7	14,0	6,2	4,2	9,6	383,6
1948 ..	61,2	49,3	90,6	40,4	20,6	11,4	9,8	9,2	7,6	6,1	2,9	6,9	315,9
1949 ..	58,1	39,7	88,9	37,6	21,4	11,4	6,4	5,8	5,1	3,9	3,5	5,7	287,4
1950 ..	53,5	37,5	77,3	36,8	19,8	12,2	6,7	3,9	3,4	3,3	2,6	5,6	262,6
1951 ..	49,9	35,4	73,6	35,0	21,6	12,7	7,9	4,4	2,4	2,3	2,2	5,3	252,7
1952‡ ..	50,1	34,3	66,9	34,5	21,5	13,9	8,4	5,5	3,0	1,8	1,7	5,7	247,4
	Distribution per 1,000 total												
1938 ..	241	122	269	135	83	52	31	20	14	10	7	16	1,000
1939–49	165	128	277	137	86	61	45	33	22	14	10	22	1,000
1950 ..	204	143	294	140	75	46	26	15	13	13	10	21	1,000
1951 ..	198	140	291	139	85	50	31	17	10	9	9	21	1,000
1952 ..	203	139	270	140	87	56	34	22	12	7	7	23	1,000

* Durations 1– year, 2– years, etc., are more correctly 11½ months–1 year 11½ months, 1 year 11½ months–2 years 11½ months, etc., prior to 1952; in 1952 the earlier durations are 0–, 9– months.

† Annual average.

‡ First maternities to women married once only; not strictly comparable with earlier figures owing to the duration shift of ½ month.

From the lower part of the table it may be seen that over three quarters of first births are in the first three years of marriage; 76·7 per cent in 1938, 77·0 per cent in 1951 and 75·2 per cent in 1952. Although these three proportions are very similar in magnitude, an examination of their constituent parts shows a difference to which attention has already been drawn in earlier sections, namely, the decline since 1938 at durations under 8½ months (9 months in 1952) conventionally associated with pre-marital conceptions. In 1938 these accounted for nearly a quarter of all first legitimate maternities and since 1950 the proportion has been about one fifth. Restricting consideration to later durations produces the distributions on page 31. (To facilitate comparison between 1952 and the earlier years in the series an adjustment has been made to the 1951 distribution to make an estimated allowance for the ½ month tabulation shift).

The underlying tendency in the war and immediate post-war years to postpone births is clearly seen by the shift from shorter to longer durations in the distribution for 1939-49, as compared with the periods before and after. To a much less extent, a comparison of the distributions of 1950-51 with that of 1938 shows an opposite effect, namely a shift from longer to shorter durations, especially to durations under two years. There are exceptions to the excess of the 1938 proportions at the longer durations over those of 1950 and 1951, namely, at

durations over 8 years in 1950 and over 9 years in 1951. The same feature is carried forward to durations of 10 years and over in 1952. In the 1938 experience, these durations are affected by the abnormally low marriage incidence associated with the years of economic depression. In experiences of 1950-51 they relate to the marriages of 1942 and earlier, the years of high marriage incidence associated with the outbreak of war. This suggests that the higher proportions at these durations in 1950 and 1951 are not attributable to a higher intensity per married woman at risk, but to greater numbers at risk. In 1952 there is rather less concentration in the first two years of marriage and the distribution is generally much more similar to that of 1938.

Period	Duration of marriage										
	All Durations over 8½ months (9 months in 1952)	8½–11½ months (9–12 months in 1952)	Years								
			1–	2–	3–	4–	5–	6–	7–	8–	9–	10+
1938	1,000	161	355	178	109	68	40	27	18	14	9	21
1939–49	1,000	153	331	165	103	73	53	40	26	17	12	27
1950	1,000	179	370	176	95	58	32	19	16	16	12	27
1951	1,000	174	363	173	106	63	39	22	12	11	11	26
Adjusted												
1951	1,000	179	360	171	106	63	39	21	12	12	11	26
1952*	1,000	174	339	175	109	70	43	28	15	9	9	29

* Women married once only.

Birth Occurrences and Registration Time Lag

The statutory period allowed for registration of either a live birth or a still-birth is 42 days and as a consequence there has generally been an appreciable time lag between the occurrence of a birth and its subsequent registration. In the past the time lag has been found to decrease markedly after the introduction of an incentive to register earlier, for example, by the dependence of the issue of food ration books and Family Allowances upon birth registration. Conversely, registration has become more tardy when such incentives have been removed or have become less compelling.

The registration time lag at the beginning of each month is determined from a "sample", consisting of the first entries in that month in a fixed group of registration districts, selected haphazardly but constrained to cover the various regions of the country and both urban and rural districts. The figures shown below are the unweighted means of the time lags in days in the selected entries and refer to the beginning of the periods shown:—

First World War

1914	1915	1916	1917	1918	1919	1920	1921
36·0	33·3	30·8	31·1	30·5	21·2	24·3	31·6

Second World War

	1939	1940–45	1946	1947	1948	1949	1950	1951	1952
1st Quarter	32·6	17·2	12·0	9·3	8·0	8·2	8·7	10·9	10·1
2nd „	31·7	15·6	9·0	8·2	8·0	7·5	8·3	9·6	9·3
3rd „	31·3	14·2	9·0	8·4	7·0	7·5	9·2	9·5	9·5
4th „	27·6	13·3	8·7	7·3	7·1	7·8	9·0	9·4	10·0

The method of calculation of these time lags is such that they may provide a biassed estimate of the average national time lag at any particular time, but to show the relative changes from quarter to quarter—the purpose for which they were originally intended—the retention of the original areas has some merit, and it seems reasonable to suppose that the broad changes shown do reflect the true national experience.

In the First World War period the decrease in the time lag as a consequence of food rationing was relatively slight and was more accentuated after the war had ended. By 1921, three years after the war, the lag had been practically extended to the pre-war figure. The shortening of the interval in the Second World War was much greater and occurred more quickly but the lowest averages were again recorded after the war, viz. in 1948, when food rationing became more stringent. The increase since 1948 has been small and though there is an upward tendency the movement is slow. The continued association of birth registration and Family Allowances must make a return to pre-war practice unlikely.

The importance of these time lags arises from their influence on the difference between the number of births registered in a period and the number occurring in that period. Occurrences are usually the more appropriate statistics for fertility measurement but registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag be constant, if birth incidence is changing; and also, even though birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, and was very small in the settled conditions of 1952 as the following figures show:—

Ratio of birth occurrences to registrations

1939	1940	1941	1942	1943	1944	1945
·992	·972	·986	·996	1·002	1·009	·992
1946	1947	1948	1949	1950	1951	1952
1·001	·993	·998	·999	1·008	·997	1·001

Seasonal Incidence of Births

The pre-war incidence of legitimate live births followed a regular annual cycle with a minimum in the fourth quarter (corresponding to conceptions in the first quarter) and a maximum in the second quarter (corresponding to conceptions in the previous third quarter). Table XVII shows the quarterly distribution in 1939, a typical pre-war year. The war disturbances, especially the sharp fluctuations in the birth rate, distorted this pattern, but the table shows that by 1951 a return had been made to the seasonal periodicity of pre-war years. This is even more clearly the case in 1952.

The incidence of illegitimate births, less influenced by the war disturbances, has a minimum and maximum in the fourth and second quarters, like legitimate births, but differs in that the periodicity is associated with a larger swing, and in that the births of the first quarter (corresponding to the previous second quarter conceptions) markedly exceed those of the third quarter (corresponding to the previous fourth quarter conceptions). Here also the 1952 distribution resembles that of pre-war years.

Table XVII.—Ratio of Quarterly Births to Average Quarterly Births taken as 100, 1939 and 1946 to 1952, England and Wales

Period	Year							
	1939	1946	1947	1948	1949	1950	1951	1952
	Legitimate Live Births							
1st Quarter	99	86	109	105	102	104	103	102
2nd „	106	99	106	103	105	104	107	104
3rd „	101	105	97	99	100	98	99	100
4th „	94	100	88	93	93	94	91	94
Year	400	400	400	400	400	400	400	400
	Illegitimate Live Births							
1st Quarter	105	107	110	107	105	106	104	103
2nd „	107	110	108	109	106	107	109	107
3rd „	100	95	98	96	99	96	96	100
4th „	88	88	84	88	90	91	91	90
Year	400	400	400	400	400	400	400	400
	Legitimate Stillbirths							
1st Quarter	104	91	115	109	104	104	107	107
2nd „	104	99	105	102	105	104	103	102
3rd „	98	101	93	96	97	97	95	94
4th „	94	109	87	93	94	95	95	97
Year	400	400	400	400	400	400	400	400

Variations in the incidence of legitimate stillbirths are due to the combined effect of two factors, the seasonal incidence of all legitimate births, live and still, and seasonal variations in stillbirth rates, the former having the greater influence. Thus there is a strong tendency for the distribution to follow that of live births, but the effect of the generally higher stillbirth risk in winter months can be seen.

Table XVIII.—Relative Birth Incidence in Calendar Months, 1939, 1950 to19 52, England and Wales

Month of Occurrence	Ratio of Monthly Daily Average to that of the Calendar Year, taken as 1,000											
	Legitimate Live Births				Illegitimate Live Births				Legitimate Stillbirths			
	1939	1950	1951	1952	1939	1950	1951	1952	1939	1950	1951	1952
January	980	1,022	1,005	990	1,076	1,051	982	983	1,043	1,038	1,036	1,055
February	995	1,044	1,041	1,035	1,041	1,059	1,071	1,026	1,045	1,098	1,115	1,101
March	1,041	1,085	1,076	1,062	1,080	1,107	1,098	1,082	1,078	1,043	1,119	1,069
April	1,073	1,065	1,076	1,062	1,046	1,068	1,111	1,101	1,068	1,081	1,059	1,078
May	1,078	1,049	1,084	1,051	1,138	1,076	1,117	1,073	1,060	1,023	1,058	1 011
June	1,043	1,025	1,057	1,006	1,044	1,075	1,061	1,063	1,002	1,015	977	984
July	1,025	969	1,016	1,000	1,038	948	1,011	1,034	984	937	968	928
August	985	960	968	974	960	931	919	958	972	964	935	941
September	1,004	1,002	973	1,006	969	984	938	986	963	995	908	951
October	939	941	892	954	859	912	869	879	938	916	931	989
November	914	917	882	923	853	873	870	898	932	958	944	963
December	927	926	936	938	898	920	957	921	917	944	954	937
Year..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Since 1938 tabulations of births by month of occurrence have been shown in Table YY of Part II up to 1951 and in 1952 in Table TT, and permit a closer study of the seasonal incidence of births. The length of calendar months varies, and therefore to allow for this, Table XVIII shows daily averages.

The figures must be accepted with some slight reserve since the daily average is a sensitive index and there has not yet been a period of stable conditions (the annual birth incidence is still slowly changing) to permit a clear pattern to emerge.

For legitimate live births, the table shows that in 1952 the daily average rose sharply until March and April and resembled 1950 in that the average fell thereafter; this contrasts with 1951 when the average continued to rise into May. In that month of 1952 a steep decline occurred interrupted only by a minor peak in September (corresponding to conceptions at Christmas when there is a concentration of new marriages) following the normal pattern. After reaching a minimum in November (below the annual daily average by 8 per cent in 1952) the rising phase commences and continues into the following year as the cycle repeats itself.

The course of illegitimate births in both years exhibits the same features as that for legitimate births, including the minor upward fluctuation in September, but the amplitude of the cycle is greater.

A comparison of the ratio shown in Table XVIII for legitimate stillbirths and live births shows the same general similarity as was indicated by the quarterly table, the higher stillbirth rates of the winter months exercising a perceptible influence.

Sex Ratio at Birth

In 1952 there were 1,054 male live births per 1,000 female live births. This ratio was 6 per thousand less than in the previous year.

In the present century there has been an upward but irregular trend with three distinct periods when the sex ratio was temporarily lifted above the long term trend. The first occasion was in the years 1919 to 1922, the second between 1934 and 1937 (approximately) and the third from 1942 to 1944. It has been suggested that the first and third of these increases were in some way attributable to war conditions and the second to the abnormal economic conditions of the 1930's, but these suggestions have never been substantiated to the extent of demonstrating causation. It might be conjectured that these three periods were alike in containing an undue proportion of first births to young mothers, in the marriage booms after the First World War, after the recovery from the economic depression and—with a delayed sequence in births perhaps attributable to war conditions—at the onset of the Second World War, but these suggestions are, at best, plausible. Attempts to produce convincing evidence have so far failed.

The generally rising trend in the sex-ratio in the present century can be attributed to the continuous reduction of foetal mortality. Biologically, sex is determined, not at birth, but at conception, and losses from abortion and stillbirths intervene between conception and live birth. Thus, since abortion and stillbirth rates are known to be higher for males, the sex ratio of live births will differ from that of conceptions. Further, reductions in abortion and stillbirth rates would produce increases in the sex ratio of live births, although the sex-ratio at conception might remain constant.

Table XIX.—Male Births per 1,000 Female Births distinguishing Legitimacy and whether Live or Still, Quinquennia from 1928 to 1950, 1951 and 1952, England and Wales

Period	Legitimate Births			Illegitimate Births		
	Live	Still	Live and Still	Live	Still	Live and Still
1928–30 ...	1,044	1,231	1,051	1,037	1,280	1,049
1931–35 ...	1,051	1,207	1,057	1,044	1,153	1,049
1936–40 ...	1,054	1,183	1,059	1,050	1,117	1,054
1941–45 ...	1,061	1,158	1,064	1,074	1,173	1,078
1946–50 ...	1,061	1,169	1,063	1,056	1,238	1,061
1951 ...	1,060	1,179	1,062	1,060	1,277	1,066
1952 ...	1,054	1,149	1,056	1,066	1,194	1,070

From Table XIX, which shows masculinity for live and stillbirths in both legitimate and illegitimate sections, it may be seen that the proportion of boys is consistently higher amongst stillbirths than live births, and this implies that stillbirth losses are greater for boys than girls. It will also be noticed that as the stillbirth rate has been reduced the sex mortality differential has also been reduced so that the masculinity of legitimate stillbirths has generally fallen since 1928-30.

For legitimate live births 1952 presents a sharp downward fluctuation from the high level of masculinity reached as a result of a long term upward trend. This is a larger fluctuation than has occurred for several years, but it is no more explicable than previous sudden movements in the ratio. The upward trend in masculinity has persisted for illegitimate live births.

Multiple Births

During 1952 there were 689,371 births (live and still) from 680,715 maternities, the excess of 8,656 being the additional children born in multiple births. Tables CC and DD of 1952 Part II give details of the 8,590 maternities with multiple births and show that 8,525 produced twins, 64 triplets and 1 quadruplets, a total of 16,280 live and 966 stillborn children.

The frequencies of multiple maternities and births in the current year compared with the whole period since 1938 when the data was first tabulated are summarised as follows:—

	All Multiple		Twins		Triplets	
	1938–51	1952	1938–51	1952	1938–51	1952
Mutliple Maternities* per 1,000:						
Total Maternities ...	12·36	12·62	12·25	12·52	0·108	0·094
Multiple Births per 1,000:						
Total Births	24·53	25·02	24·20	24·73	0·320	0·279
Live born children ...	23·70	24·16	23·39	23·90	0·298	0·258
Stillborn children ...	52·93	61·78	51·83	60·57	1·075	1·151

* A maternity is treated as multiple whether or not the children involved are live or stillborn.

The probabilities of a multiple event occurring will be the reciprocals of the rates shown above, so that taking mothers of all ages together the chance of a multiple maternity was 1 in 81 in 1938-1951 and 1 in 79 in 1952. Likewise 2 out of every 82 children born in 1938-1951 were twins, triplets or quadruplets, and 2 out of 80 in 1952, the proportion being about twice as great amongst still-born children as amongst live born.

Birth Rates in Different Parts of the Country

The birth rates of individual administrative areas in 1952 are given in Tables 12 and E. They are summarised in Table XX, which shows, for each standard region, conurbation and density aggregate, live birth rates and the ratio of the local to the national rate. In Table XXI these rates are ranked in order of size.

Table XX.—Birth Rates by Standard Regions, Conurbations and Density Aggregates, 1952

(*All the ratios were calculated before rounding off the rates*)

Area	All Live Births				Ratio of proportion married among Females 15-44 to national proportion as at 1951 Census	Illegitimate Live Births	
	Crude Rate per 1,000 Home population	Adjusted Birth Rate	Ratio of Local to National Rate			Crude Rate per 1,000 Home Population	Ratio of Local to National Rate
			Crude	Adjusted			
ENGLAND AND WALES ..	**15·3**	**15·3**	**1·00**	**1·00**	**1·00**	**0·74**	**1·00**
Regions and Conurbations:							
Northern	17·2	17·6	1·12	1·14	0·99	0·68	0·91
Tyneside Conurbation ..	*17·1*	*16·8*	*1·12*	*1·09*	*0·98*	*0·70*	*0·94*
Remainder of Northern ..	*17·2*	*17·9*	*1·12*	*1·17*	*1·00*	*0·67*	*0·90*
East and West Ridings ..	15·5	15·6	1·01	1·02	1·03	0·74	1·00
West Yorkshire Conurbation	*15·1*	*15·1*	*0·98*	*0·98*	*1·02*	*0·83*	*1·12*
Remainder of East and West Ridings	*15·8*	*16·1*	*1·03*	*1·05*	*1·04*	*0·68*	*0·91*
North Western	15·8	15·8	1·03	1·03	0·99	0·76	1·03
South East Lancashire Conurbation	*15·5*	*15·0*	*1·01*	*0·98*	*1·01*	*0·83*	*1·12*
Merseyside Conurbation ..	*18·8*	*18·4*	*1·23*	*1·20*	*0·92*	*0·93*	*1·26*
Remainder of North Western	*14·5*	*14·9*	*0·95*	*0·98*	*1·00*	*0·60*	*0·81*
North Midland	15·8	16·1	1·03	1·05	1·05	0·76	1·03
Midland	16·0	15·9	1·05	1·04	1·03	0·71	0·96
West Midland Conurbation	*16·0*	*15·6*	*1·05*	*1·02*	*1·02*	*0·69*	*0·94*
Remainder of Midland ..	*16·1*	*16·4*	*1·05*	*1·07*	*1·03*	*0·72*	*0·97*
Eastern	15·1	15·7	0·99	1·02	1·02	0·77	1·03
London and South Eastern ..	14·1	13·4	0·92	0·87	0·97	0·75	1·02
Greater London	*14·1*	*13·0*	*0·92*	*0·85*	*0·97*	*0·77*	*1·04*
Remainder of South Eastern	*13·8*	*14·7*	*0·90*	*0·96*	*0·97*	*0·71*	*0·96*
Southern	15·3	16·1	1·00	1·05	1·00	0·85	1·15
South Western	14·8	15·6	0·97	1·02	1·00	0·72	0·97
Wales	16·0	16·5	1·04	1·07	0·99	0·62	0·84
Wales I	*16·3*	*16·6*	*1·06*	*1·08*	*1·01*	*0·58*	*0·78*
Wales II	*15·3*	*16·4*	*1·00*	*1·07*	*0·94*	*0·73*	*0·98*
Density Aggregates:							
Conurbations	15·2	14·4	0·99	0·94	0·98	0·78	1·06
Areas outside the Conurbations:							
Urban areas with populations of 100,000 and over	15·8	15·8	1·03	1·03	1·01	0·83	1·11
Urban areas with populations of 50,000 and under 100,000	15·3	15·6	1·00	1·02	1·01	0·80	1·08
Urban areas with populations under 50,000 ..	15·3	15·8	1·00	1·03	1·01	0·66	0·89
Rural Areas	15·3	16·5	1·00	1·08	1·01	0·66	0·89

Table XXI.—Ranking Comparison of Birth Rates in Regions, Conurbations and Density Aggregates, 1952*

Area	All Live Births	
	Crude	Adjusted
Conurbations and Remainders of Regions		
Tyneside Conurbation	3	3
Remainder of Northern Region	2	2
West Yorkshire Conurbation	13	13
Remainder of East and West Ridings	8	8½
South-East Lancashire Conurbation	9	14
Merseyside Conurbation	1	1
Remainder of North Western Region	15	15
North Midland Region	7	7
West Midland Conurbation	6	12
Remainder of Midland Region	5	5½
Eastern Region	12	10
Greater London	16	17
Remainder of South Eastern Region	17	16
Southern Region	10	8½
South Western Region	14	11
Wales, Region I	4	4
Wales, Region II	11	5½
Density Aggregates		
Conurbations	5	5
Areas outside conurbations:		
Urban with populations 100,000 or over	1	3
Urban with populations 50,000 and under 100,000	4	4
Urban with populations under 50,000	2	2
Rural	3	1

* In accordance with the usual convention, ties are given the mean of the ranks in question; thus where in the Adjusted column two areas have equal rates which would rank them both fifth, they are given the rank 5½ (the mean of 5 and 6) and the next area is ranked 7.

Comparisons of the crude rates between different areas are not strictly valid, since they take no account of the varying sex-age composition of the population of the different areas. To overcome this difficulty in the case of all live births an approximate adjustment may be made by multiplying the rates by the areal comparability factors (A.C.F.s) introduced in 1949 and described in the Civil Text volume for 1946-50. They are shown in Tables 12 and E. The nature of this correction has to be kept in mind in interpreting the adjusted rates. The A.C.F. simply allows for the varying proportion of women of child-bearing

age in the aggregate local population, but not for any other factors, e.g. the proportion of these women who are married. Adjustment for the latter is required if the object is to compare the fertility levels of married women in different areas; on the other hand if the object is to compare the birth increment to local populations, the proportion married is separately examined (inter alia) as a possible source of birth rate variation *after* such variation (adjusted for age and sex) has been ascertained. For this purpose Table XX includes a column showing the ratio of the proportion married among females aged 15-44 to the national proportion at the 1951 Census.

All Live Births.—The Merseyside Conurbation has the highest rates among the regions, both crude and adjusted, while Greater London and the Remainder of the South Eastern Region have the lowest. But the relatively low crude rate of Wales II (North and Central Wales) and the relatively high one of the West Midland Conurbation are both due to the peculiar sex-age structure of their populations; adjustment raises the ranking of the former from 11 to $5\frac{1}{2}$* and lowers that of the latter from 6 to 12. Similarly the ranking for the South-East Lancashire Conurbation is reduced from 9 to 14 after adjustment, and that for the South West Region is raised from 14 to 11. No other large differences are affected by sex-age adjustment. It will be seen from Table XX that neither the high (adjusted) birth rates of the Merseyside Conurbation, the Northern Region and Wales nor the low birth rates in Greater London are due to abnormal marriage incidence since the proportion of the female population aged 15-44 who are married is not significantly different from that of England and Wales as a whole. In many other areas high marriage proportions do account for the excess of the birth rate above the national figure.

Among density aggregates the crude rate is highest for the urban areas (outside conurbations) with a population of 100,000 or more, and lowest for the conurbations; but the adjusted rates are roughly in reverse order of urbanisation, the rural districts having the highest and the conurbations the lowest rate. Differences in married proportions do not account for this gradient.

Illegitimate Live Births.—Among the regions Wales I still has the lowest illegitimacy rate. High rates were experienced in the West Yorkshire Conurbation, the South East Lancashire Conurbation, the Merseyside Conurbation and the Southern Region. In Merseyside the high rate is associated with a low proportion married in the total population.

Among density aggregates illegitimacy was higher in the conurbations and large towns and lower in the small towns and rural areas.

Stillbirths

The registration of stillbirths in England and Wales began on 1st July, 1927, when the Births and Deaths Registration Act, 1926, came into operation. The Statistical Reviews, Part II, show numbers of stillbirths in England and Wales as a whole annually by sex and legitimacy (Table B), and quarterly in total (Table D), from 1927. Table E1 gives annual totals of stillbirths for the main regions, density aggregates, metropolitan and county boroughs and administrative counties, and from 1949 Table E gives the same information for all county districts.

Under the Population (Statistics) Act, 1938, additional information has been collected at the registration of births, including stillbirths, and detailed tabulations of stillbirths by legitimacy and mother's age appear in the Fertility Analyses of the Annual Reviews, Part II.

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* Wales II and the remainder of the Midland Region tie for 5th and 6th place.

The secular trend of stillbirth rates and their geographical variation can be seen from Table LIII on page 100 and from Table LIV on page 101. The broad picture is that the stillbirth rate has remained fairly stable since 1949, the figures for the individual years 1949-52 being 22·7, 22·6, 23·0, 22·7 (per thousand total live and stillbirths). The effects of multiple maternities, age of mother and birth order were amply discussed in the Civil Text for 1946-50 pp. 141-144 where it was shown that the risk is much higher in multiple than in single births (especially at the younger ages of mother where the single birth risks are lower); is higher in male than in female births; increases with age of mother except at the youngest ages; and independently of age it varies with parity being highest at first births, and lower at the second than at any other higher parity birth. Treatment of such aspects as these requires the provision of data for several years in order that the numbers should be sufficiently large to justify analysis. The statistics for 1951 and 1952 do not increase the available data to an extent justifying a fresh analysis and a few years must elapse before these topics can be profitably discussed again.

MARRIAGES

During 1952 there were 349,308 marriages registered in England and Wales. This compares with 360,624 marriages in 1951, and 358,490 in 1950. As a result of the special influences of the war of 1939-45, the annual average number of marriages in the period 1939-49 was 384,039. Before the war the annual marriages had been rising from an average level of about 301,000 in 1921-25 to 326,000 in 1931-35 and in 1938 reached a figure of 361,768.

In relation to the total population, of all ages and marital conditions, the experience of 1952 represents a rate of 15·8 persons married per 1,000 population compared with 16·4 in 1951, 18·1 in 1939-49, 17·6 in 1938 and 17·5 in 1937. The numbers of marriages and rates per 1,000 population for calendar years are given in serial form in Tables B and C of Part II and in Table D for calendar quarters. The figures for each year from 1936 to 1952 have been extracted from these tables and are shown in Table XXII, from which it may be seen that in the post-war period, a peak was reached in 1947 with a rate of 18.6 persons

Table XXII.—Marriages and Marriage Rates, 1936 to 1952, England and Wales

	Number of Marriages (in thousands)					Persons married per 1,000 population (in the form of annual rates)				
	Year	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
1936	355	50	101	115	89	17·4	9·8	19·8	22·5	17·3
1937*	359	71	80	121	87	17·5	14·0	15·7	23·5	16·8
1938	362	52	102	117	91	17·6	10·3	19·9	22·4	17·5
1939-45*	381	75	99	110	97	18·1	14·6	18·8	20·7	18·3
1946	386	78	101	110	96	18·0	14·8	19·0	20·4	17·9
1947	401	75	109	119	97	18·6	14·2	20·3	22·0	18·0
1948*	397	95	93	123	85	18·2	17·6	17·2	22·5	15·6
1949	375	82	96	114	83	17·1	15·1	17·5	20·7	15·1
1950	358	87	81	115	76	16·3	16·0	14·7	20·7	13·7
1951*	361	110	66	111	73	16·4	20·2	12·1	20·1	13·2
1952	349	107	69	103	70	15·8	19·4	12·7	18·6	12·6

* In years so marked, Easter fell in the first quarter. During the years 1939 to 1945, Easter fell in the first quarter in 1940 only.

married per 1,000 population after which the rate declined to 16·3 in 1950. The rate of 16·4 for 1951 was not significantly different from that of 1950, but the figure of 15·8 for 1952 represents an appreciable further reduction.

A high incidence of marriage extending over a fairly long period embracing the war years has tended to deplete the non-married component of the population. It is to the latter—the population available for marriage—that marriages should be related and in Table XXIII a comparison is made between marriage rates based on the total population and on the non-married population aged 15 and over of all ages extracted from Table C of Part II.

Table XXIII.—Marriage Rates per 1,000 Population of all ages and per 1,000 non-married population aged 15 and over by sex, 1938, 1939-49, 1950 to 1952, England and Wales

Period	Per 1,000 Population		Per 1,000 Non-married Population aged 15 and over			
			Males		Females	
	Rate	Ratio to 1938 rate taken as 100	Rate	Ratio to 1938 rate taken as 100	Rate	Ratio to 1938 rate taken as 100
1938	17·6	100	61·2	100	47·8	100
1939-49*	18·1	103	68·8	112	53·0	111
1950	16·3	93	66·1	108	51·7	108
1951	16·4	93	69·2	113	52·1	109
1952	15·8	90	67·6	110	50·9	106

* Annual averages

The marriage rate in 1952 per 1,000 population of all ages was 3 per cent below that of 1951 and 10 per cent below that of 1938. In contrast, though the rate in 1952 when related to the marriageable population was for males 3 per cent below that of 1951, it was still 10 per cent above that of 1938; for females it was 3 per cent below that of 1951 but still 6 per cent above that of 1938. It was suggested in the Review for 1951 that some decline from the high rates which had been maintained for so prolonged a period was to be expected, and such a decline appears to have begun in 1952.

Marriage Analyses by Sex, Age, etc.

The marriage rates so far considered have taken no account of the ages at which the marriages took place nor of the prior marital condition of those who were married. Estimates of the population by sex, age and marital condition have been made annually and the marriages by single years of age for each sex and condition are given in Table G of successive Parts II. Marriage rates for each sex and age, distinguishing first marriages from remarriages, are shown in Table XXIV.

From this table it may be seen that the changes in marriage rates (per 1,000 at all ages over 15) from 1950 to 1952, as shown in Table XXIII, do not apply equally at each age and for each marital condition. Following the heavy incidence of divorce in 1947, remarriage rates at the younger ages soared to a peak in 1947-48. They have since generally declined toward a more stable level. Too much notice should not be taken of the remarriage rates at ages below 35 where the numbers at risk are small and sharp fluctuations are liable to occur. A more reliable guide here is provided by the rate for all ages over 15 (column 8 of the table). First marriage rates have declined in 1952 more for bachelors than for spinsters just as previously they had risen less for bachelors than for spinsters; a reflection of the increasing ratio of males to females in the marriageable population.

The persistently high marriage incidence of recent years has implied a continuing increase in the proportion married. As the increases in marriages were concentrated at the lower ages a further lowering of the average age at first marriage must accompany the depletion of the non-married, for the age structure of this component of the population must become more youthful as older members pass into the married population. This can be seen more clearly from Table XXV. In fact the mean age at first marriage fell for bachelors (with spinsters) from a peak of 27·74 in 1947 to 27·20 in 1952 and for spinsters (with bachelors) from 24·84 in 1947 to 24·42 in 1952.

A summary of the changes in marriage rates in the various age groups is shown in column (9) of Table XXIV in the form of a comparison of the crude rate, for all ages combined, with that of 1938 and in column (11) as a similar but age standardised comparison.

Table XXIV.—Annual Marriage Rates per 1,000 Bachelors, Widowers and Divorced Men, Spinsters and Widows and Divorced Women respectively, at each of several age periods, 1931, 1938, 1939-1949, 1950 to 1952, England and Wales

Year	Annual marriage rate per 1,000 in each age group						Marriage rate per 1,000 population over 15 in each class	Ratio to corresponding rate for 1938 taken as 1,000	Marriage rate which would have resulted had the 1938 age rates been in operation	Ratio of actual marriage rate (col. 8) to rate in previous column (10)
	15–	20–	25–	35–	45–	55 and over				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
					BACHELORS					
1931	3·2	72·6	141·3	49·8	16·3	5·5	56·0	864	65·0	862
1938	3·2	87·0	160·6	57·0	18·5	4·8	64·8	1,000	64·8	1,000
1939–49	6·5	112·3	160·0	62·2	21·0	5·1	71·4	1,102	63·1	1,132
1950	5·6	113·8	148·2	51·6	19·5	4·9	67·6	1,043	62·7	1,078
1951	6·2	125·7	152·1	52·3	19·7	5·3	71·4	1,102	62·3	1,146
1952	5·9	124·3	149·5	49·9	19·0	5·0	69·5	1,073	61·7	1,126
					WIDOWERS AND DIVORCED MEN					
1931	—	131·7	185·9	133·5	67·3	15·0	35·9	942	40·6	884
1938	—	153·6	219·8	152·6	79·1	15·9	38·1	1,000	38·1	1,000
1939–49	—	187·9	341·5	207·6	105·0	17·6	49·5	1,299	37·8	1,310
1950	—	431·0	415·7	242·5	118·6	18·1	58·2	1,528	39·2	1,485
1951	—	320·0	385·7	231·8	119·7	19·3	57·4	1,507	39·2	1,464
1952	—	153·0	369·2	226·3	121·9	19·6	57·4	1,507	39·6	1,449
					SPINSTERS					
1931	17·0	106·4	96·6	21·3	7·8	2·2	51·6	840	67·2	768
1938	22·6	147·9	117·9	22·0	8·6	2·0	61·4	1,000	61·4	1,000
1939–49	36·7	190·9	118·7	29·0	10·2	2·0	69·5	1,132	56·3	1,234
1950	39·3	208·9	123·7	29·2	10·3	2·1	69·4	1,130	52·1	1,332
1951	41·3	219·6	125·3	30·3	10·4	2·2	71·5	1,164	51·5	1,388
1952	40·6	221·2	123·0	29·3	10·5	2·1	70·1	1,142	50·6	1,385
					WIDOWS AND DIVORCED WOMEN					
1931	—	121·9	107·0	36·5	14·1	2·2	9·8	961	11·9	824
1938	—	197·1	131·2	50·1	14·7	2·5	10·2	1,000	10·2	1,000
1939–49	—	277·6	199·5	70·6	21·3	2·7	15·3	1,500	10·7	1,430
1950	—	336·8	229·3	83·6	27·2	2·9	18·1	1,775	11·1	1,631
1951	—	328·5	222·2	86·4	27·5	3·0	16·9	1,657	10·3	1,641
1952	—	441·3	236·3	87·3	29·9	3·0	17·0	1,667	9·9	1,717

The 1952 crude first marriage rates for bachelors and spinsters were still above those of 1938, the excess being 7·3 per cent and 14·2 per cent respectively. The age standardised comparison, however, indicates greater increases to 1951 and a smaller movement between 1951 and 1952. The age standardised rate in 1952 for bachelors was 12.6 per cent above 1938 and for spinsters the excess was 38·5 per cent (i.e. only slightly less than in 1951). This greater increase in the age standardised rates arises from a relative lack of young bachelors and spinsters in the population in recent years as compared with 1938 resulting from their depletion by the high bachelor and spinster marriage rates of the intervening period, despite continual replenishment by the new generations attaining marriageable age. This feature is more marked for spinsters than for bachelors.

Table XXV.—Ratio of Marriage Rates for Bachelors, Widowers and Divorced Men, Spinsters and Widows and Divorced Women, to those of 1938 taken as 100, by age, 1931, 1939-1949, 1950 to 1952, England and Wales

15–	20–	25–	35–	45–	55 and over	All Ages*	Period	15–	20–†	25–	35–	45–	55 and over	All Ages*
BACHELORS								WIDOWERS AND DIVORCED MEN						
100	83	88	87	88	115	86	1931	—	—	85	87	85	94	88
100	100	100	100	100	100	100	1938	—	—	100	100	100	100	100
203	129	100	109	114	106	113	1939–49	—	—	155	136	133	111	131
175	131	92	91	105	102	108	1950	—	—	189	159	150	114	149
194	144	95	92	106	110	115	1951	—	—	175	152	151	121	146
184	143	93	88	103	104	113	1952	—	—	168	148	154	123	145
SPINSTERS								WIDOWS AND DIVORCED WOMEN						
75	72	82	97	91	110	77	1931	—	62	82	73	96	88	82
100	100	100	100	100	100	100	1938	—	100	100	100	100	100	100
162	129	101	132	119	100	123	1939–49	—	141	152	141	145	108	143
174	141	105	133	120	105	133	1950	—	171	175	167	185	116	163
183	148	106	138	121	110	139	1951	—	167	169	172	187	120	164
180	150	104	133	122	105	139	1952	—	224	180	174	203	120	172

* Age Standardised.

† Based on small numbers.

Remarriage rates of the widowed and divorced taken together are weighted means of the separate rates for widowed and divorced, the weighting depending upon the relative numbers of each class. As a consequence of the substantial increase in the incidence of divorce since the war, the remarriage rates of the divorced are exerting a much stronger influence upon the combined rate, particularly at the younger ages. Since the remarriage rates of the divorced are also several times greater than those of the widowed, this is leading to a considerable inflation of remarriage rates of the divorced and widowed when combined. This is the significance to be attached to the substantial increase in these rates since 1938; the crude comparison gives increases in 1952 of 50·7 per cent for widowers and divorced men and 66·7 per cent for widows and divorced women; the age standardised comparison gives increases of 44·9 per cent for widowers and divorced men and 71·7 per cent for widows and divorced women between 1938 and 1952.

Marriages of Minors

Of the total marriages registered in 1952, those of 21,447 males and 90,363 females related to minors. These figures compare with 22,401 males and 92,422 females in 1951 and 12,164 males and 59,268 females in 1938. There was a normal excess of females in 1952; they outnumbered males by 4·2 to 1, compared with 4·1 to 1 in 1951 and 4·9 to 1 in 1938. The increase in the marriage of male minors during the war lowered the proportion over the period 1939-49 to 3·6 to 1.

The bridegroom was a minor in 6·1 per cent of all marriages in 1952, slightly lower than the proportion of 6·2 per cent in 1951 but well above the 1938 figure of 3·4 per cent. In the period 1939-49 the proportion was 6·8 per cent. The corresponding proportions for brides were: 1952 25·9 per cent; 1951 25·6 per cent; 1938 16·4 per cent; and 1939-49 24·2 per cent. For both bridegrooms and brides the changes in the proportions between 1951 and 1952 were relatively small.

These proportions and also marriage rates for minors are given in Table XXVI, which shows, in columns (6) and (7), that marriage rates of minors in 1952 were 115 per cent and 94 per cent above those of 1938 for males and females respectively. These are much greater increases in marriage rates than those associated with adult ages during the same period.

Table XXVI.—Marriages of Minors, Proportion to all Marriages, Marriage Rates, and the Ratio of these Rates to that for 1938. 1931, 1938, 1939-49, 1950 to 1952, England and Wales

Year	Marriages of Minors per 1,000 marriages of all ages		Marriage rates per 1,000 non-married population aged 15-20		Ratio of Marriage rates in Cols. (4) and (5) to corresponding rate in 1938 taken as 100	
	Males	Females	Males	Females	Males	Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1931	43·5	158·5	6·7	24·8	112	81
1938	33·6	163·8	6·0	30·5	100	100
1939-1949	68·1	242·1	13·9	54·2	232	178
1950	56·9	247·2	12·2	58·5	203	192
1951	62·1	256·3	13·4	60·2	223	197
1952	61·4	258·7	12·9	59·3	215	194

Marriage Incidence at Reproductive Ages

In relation to population growth the special interest of the trend of marriage incidence lies in its influence on fertility. The Population (Statistics) Act of 1938 enabled the births of all children after 30th June, 1938 to be related to the ages and dates of marriage of their mothers. In the Text of the Review for 1938-39, the first dealing with the new records, a brief review was made of the nature of the influence of marriage incidence upon fertility and of the changes that had taken place prior to 1939, both in the female marriage rates and in the proportion of married females in the community, at different ages within the reproductive age period. In that Text, the numbers of married and non-married women between the ages of 15 and 49, the proportions married, the numbers of women marrying and their relation to the non-married population, were tabulated for individual years from 1911, together with earlier records at decennial census periods from 1851, the first census year at which the marital conditions of the population were distinguished. In the Civil Text for 1940-1945 these records for females were continued up to the end of 1945 and at the same time similar records were added for males, in decennial form between 1851 and 1931, and thereafter in individual years until 1945. In the Civil Text for 1946-1950 records for both sexes for those years were included; they were continued in Appendix B of the 1951 Text, and on page 254 of this volume similar records for 1952 are provided.

Marriage Rates.—It was customary before 1946 to base the main discussion of the marriage trends at the reproductive ages on all marriages, whether first or remarriage. The fact of primary interest, however, is the establishment of additional marriages, that is to say first marriages, since remarriages do no more than make good, to some extent, the marriages which are broken by death or divorce. The earlier practice, in which remarriages were included, was justified in that at the reproductive ages, both the changes from year to year and the actual marriage rates for the whole non-married female population were negligibly different from those for spinsters alone.

The rising incidence of divorce during the war and the abnormally high incidence in post-war years has increased the distortion imparted by the inclusion of remarriages, to a greater extent than can be tolerated. In Table XXVII are set out All Marriage rates for 1911, 1931 and 1938 and First Marriage rates for these years and single years thereafter to 1952, from which the distortion prior to 1938 may be judged. Diagram 1 displays a continuous record of age marriage rates from 1911 to 1952, the rates shown from 1911 to 1937 being based on All Marriages and those from 1938 on First Marriages.

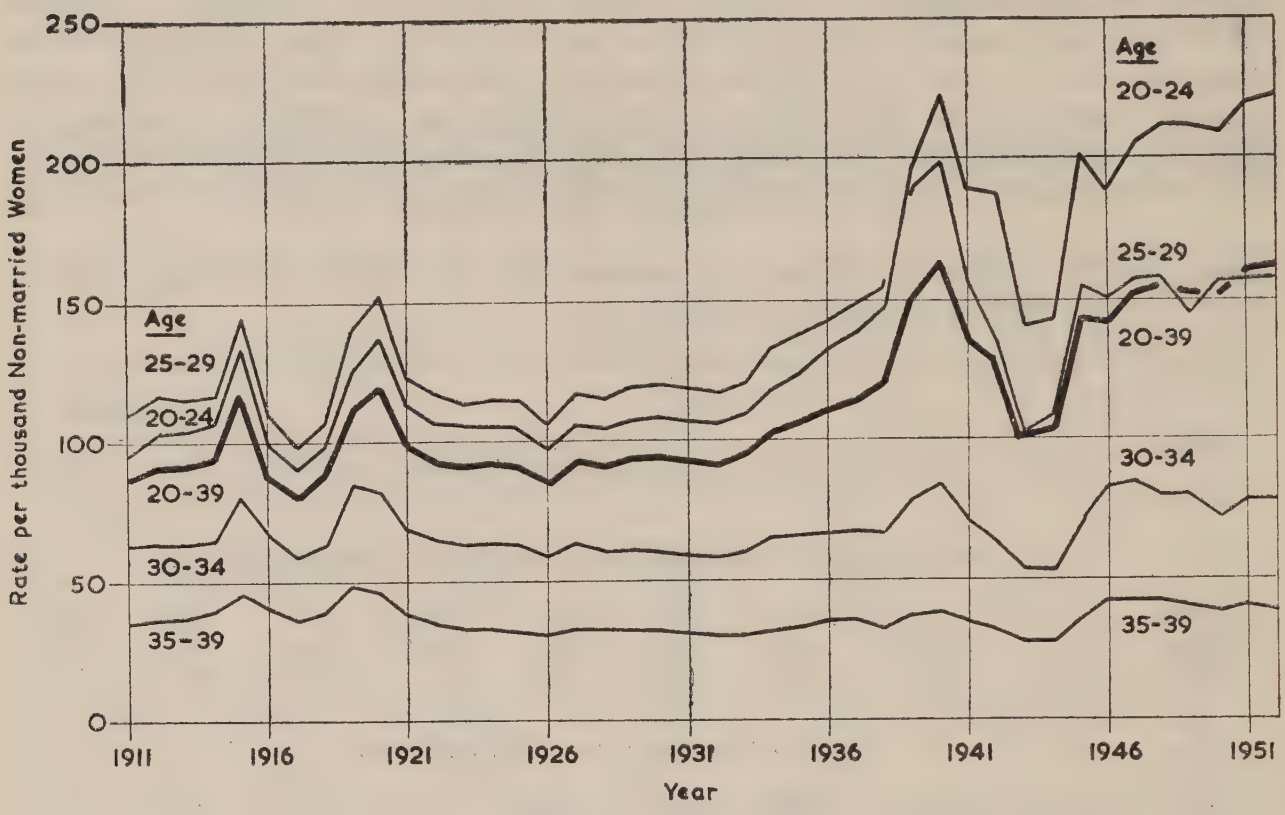
Table XXVII.—Marriage Rates of Females, by Age, 1911, 1931 and 1938 to 1952, England and Wales

Period	Age							Aggregates	
	15–19	20–24	25–29	30–34	35–39	40–44	45–49	20–39	15–49
	All Marriages per 1,000 Spinsters, Widows and Divorced Women								
1911	11·2	95·9	109·8	62·6	35·5	22·0	14·8	86·9	54·0
1931	16·9	106·5	119·8	59·6	31·0	18·0	12·6	92·8	57·8
1938	22·6	148·1	154·4	69·9	37·9	21·5	13·8	119·0	71·2
	First Marriages per 1,000 Spinsters								
1911	11·2	97·1	109·8	59·2	29·2	16·2	10·4	88·7	54·6
1931	17·1	106·8	119·1	57·2	27·0	14·5	9·6	93·6	59·3
1938	22·6	147·9	154·0	67·2	33·1	16·8	10·6	119·7	72·7
1939	32·0	197·6	188·7	78·4	37·2	18·6	11·5	150·8	90·3
1940	38·4	222·8	198·8	84·7	39·1	20·9	12·0	164·8	100·4
1941	36·3	188·9	155·1	70·3	35·1	20·6	12·1	136·5	85·0
1942	38·9	187·4	133·2	63·0	33·7	20·2	12·3	129·8	82·3
1943	34·2	141·2	101·7	54·0	28·1	17·6	11·7	100·6	65·6
1944	33·1	143·1	109·9	53·5	27·9	17·1	11·3	104·3	67·1
1945	40·0	200·6	155·6	71·4	35·4	20·2	13·0	144·4	89·9
1946	33·9	189·0	150·7	84·5	42·3	22·9	14·4	142·5	86·4
1947	36·7	205·5	157·7	85·1	42·5	22·8	13·6	152·1	91·1
1948	39·4	212·5	158·1	81·3	42·7	22·6	13·4	156·0	92·9
1949	40·5	212·0	145·6	81·8	40·4	21·3	13·1	153·9	91·3
1939-49*	36·7	191·0	150·5	73·5	36·8	20·4	12·6	139·6	85·7
1950	39·3	208·9	156·0	72·9	38·7	20·3	12·7	152·5	89·4
1951	41·3	219·6	156·4	76·6	39·9	21·3	12·8	159·7	93·2
1952	40·6	221·2	155·7	74·8	38·8	20·7	13·1	160·2	92·2

* Annual Averages

Before 1911, when the diagram commences, a long and more or less steady decline brought the rates down from 1873, when the highest rate in the 19th century was recorded, to 1909, when the lowest rate up to that time was recorded. Rates rose slightly from 1909 to 1914, when the trend became obscure owing to the wide fluctuations associated with the First World War. After the war no clear trend was observed until 1932, when a steady improvement began and was continued until 1938. At this point judging by the fragmentary evidence available, a full recovery had been made to the 1873 peak. The fluctuations of war again intervened to obscure the trend but, as may be seen from Table XXVII, the annual average rates over the disturbed period of 1939-49 were, at the aggregated ages, substantially in excess of those for 1938, indeed for almost every individual age group the 1939-49 average rates exceed those for 1938.

Diagram 1.—Marriage Rates* of Women, by age, 1911 to 1952, England and Wales (*See Text*)



* 1911-37: All marriages per 1,000 spinsters, widows and divorced women.
1938-52: First marriages per 1,000 spinsters.

Generally the 1950 rates, whilst above the 1939-49 averages, were below those of 1949, indicating that, although very high, the rates were still declining from the post-war peak. The 1951 rates were slightly above those of 1950, suggesting that this decline had been halted. In 1952 the rates increased further at ages 20-24 but at ages 15-19 and at ages above 25 the rates were reduced; in consequence the aggregate rate for 20-39 increased while that for 15-49 declined.

The marriage history of recent years is remarkable in that for nearly 15 years marriage rates on average have been maintained above the highest level ever reached in the 19th century, even for a single year. This high maintenance of high marriage rates over a long period produces important changes. Under such circumstances the population is depleted more and more of its non-married element and those non-married persons whose inclinations or health do not favour marriage form an increasing proportion of the non-married group as a whole i.e., all those nominally at risk. Even the maintenance of constant marriage rates by those more appropriately regarded as at risk would not in these circumstances prevent a decline in the rates calculated on the basis of all non-married of marriageable age. For this reason a decline in nominal marriage rates has been expected.

During the nineteenth century the marriage rate for the age group 20-24 always exceeded that for the next older group 25-29. In 1901 this position was reversed, the older group recording a higher rate for the first time. Diagram 1 shows that the younger women regained their earlier lead in 1939 and have retained it. As the majority of brides' ages lie between 20 and 30, changes in the relative marriage incidence in the two quinary age groups within this range, viz. 20-24 and 25-29, are indications of changes in the average age at marriage, which has an influence on the ultimate size of families. After 1939 the younger age group increased its lead over the older group, and a wide gap opened up between them so rapidly that some part must be attributed to abnormal conditions associated with the war. However, at least one of the

conditions which has enabled girls to marry earlier—the changing relationships between the numbers of males and females—may be assumed to be of a persistent nature, and this probably provides an explanation of the fact that the gap is still widening.

Factors Influencing Marriage.—The nature and the probable future course of factors leading to the rise in marriage rates were discussed in the Civil Text Volumes of 1940-1945 on pages 38-40, and of 1946-1950 on pages 40-42, and in the 1951 Text on pages 69 and 70. It has been shown that, while the ratio of males to females at ages 15-44 in the total population has been rising continuously since 1921, it has risen still more in the non-married section of the population at these ages. The following statement, based on census populations, shows the changes in sex ratio since 1871.

Males per 1,000 Females :—

	1871	1901	1911	1921	1931	1951
Total population, 15–44	927	923	926	876	915	969
Non-married population, 15–44 ...	967	950	959	875	945	1,120

The abnormally low ratio in 1921 and sharp rise since that year are the striking features of this statement. It will be noted that in 1951 among the non-married aged 15-44, males exceeded females for the first time, even though the sex ratio is based on census populations which exclude the predominantly male armed forces stationed abroad.

The main factors influencing these changes in the sex ratio are generally understood. The proportion of males to females at birth has increased (1911-15, 1,038 per thousand; 1931-35, 1,051 per thousand; 1946-50, 1,061 per thousand) and improvements in infant and child mortality have raised the ratio of male to female survivors. In the early years of the century there was heavy emigration with a male preponderance, and the losses in the First World War fell particularly heavily on young males. On the other hand such male losses as there were in the Second World War were in part offset by the heavy post war emigration of the wives of Allied Servicemen. Apart from migration and special factors associated with war, it seems likely that the factors producing the current high sex ratio will persist and a further increase in the ratio may be expected.

The numerical superiority of males over females in non-married persons aged 15-44 is not spread evenly over all ages, but is particularly concentrated at the younger ages where marriage rates are highest, as the following statement shows:

Non-married males per 1,000 non-married females:—

	1911	1931	1951
Age 20–24	1,016	1,097	1,395
„ 25–34	968	960	1,350

Thus, for females, there is certainly no lack of partners to choose from at the younger ages and, to the extent that this factor may influence marriage rates, there is a prospect of the maintenance of high proportions married amongst the female population.

Total Married Women of Reproductive Age.—Illegitimacy being comparatively low in this country the fertility of the community is determined largely by the total number of married women of reproductive age in the population, that is by the survivors of women who married at any time in the preceding 35 years and who have not yet passed out of the child-bearing ages. New marriages will continually replenish this number. The annual addition of new marriages in relation to the total married population represents only a small fraction, of the order of 5 per cent, so that short term changes in the marriage rates will have a correspondingly reduced effect upon the total proportions of married women in the population. The proportions of married women are shown by quinary age-groups up to age 50 for selected years in Table XXVIII.

Table XXVIII.—Married Women per 1,000 total Female Population at each Age and Ratio of proportion to that of 1938 taken as 100. 1911, 1931, 1938 and 1946 to 1952, England and Wales

Year	Age							Aggregates	
	15–19	20–24	25–29	30–34	35–39	40–44	45–49	20–39	15–49
	Married Women per 1,000 total Female Population								
1911	12	242	558	711	752	755	729	552	502
1931	18	257	587	733	755	749	733	572	529
1938	23	328	643	733	771	768	736	623	566
1946	35	436	696	800	797	784	762	686	626
1947	33	445	714	802	807	785	763	697	635
1948	38	457	730	807	816	791	763	707	643
1949	41	467	736	823	822	795	768	716	651
1950	40	473	762	814	826	801	770	724	657
1951	42	475	769	828	832	812	780	731	666
1952	42	489	778	835	838	819	784	741	673
	Ratio of proportion to that of 1938 taken as 100								
1911	52	74	87	97	98	98	99	89	89
1931	78	78	91	100	98	98	100	92	94
1938	100	100	100	100	100	100	100	100	100
1946	152	133	108	109	103	102	104	110	111
1947	143	136	111	109	105	102	104	112	112
1948	165	139	114	110	106	103	104	113	114
1949	178	142	114	112	107	104	104	115	115
1950	174	144	119	111	107	104	105	116	116
1951	183	145	120	113	108	106	106	117	118
1952	183	149	121	114	109	107	107	119	119

Throughout the period covered by the table the proportions have increased at each age group and these increases have been outstanding at ages under 25. The proportion in 1952 exceeded that of 1938 by no less than 83 per cent at age 15-19 and 49 per cent at age 20-24. The increase of 21 per cent at age 25-29 is less striking but hardly less significant, applying as it does to larger proportions married. At the younger ages the major part of the increase occurred between 1938 and 1946, and though an upward trend continues the pace is very much diminished.

The remarkable rise in the proportions at the younger ages and the much more modest increases at the older ages bring into relief two important changes—more women are marrying, and they are marrying at younger ages.

In any particular year the proportions married increase with advancing age, at first very rapidly and then more slowly, to a maximum close to age 35. They then decline slowly as new marriages are increasingly offset by widowhoods but the total reduction in the proportion up to age 50 is relatively small.

The last two columns of Table XXVIII show the proportion of married women in the reproductive age group 15-49 as a whole and in the more critical group 20-39, among whom 90 per cent of births occur. The proportions represent fractions of the reproductive years of all women which fall within married life. From 1911 to 1931 this proportion rose slightly from 50·2 to 52·9 and it rose more rapidly between 1932 and 1938 to 56·6. By 1946 it had reached 62·6 and by 1952 67·3. In the age group 20-39, the proportion has risen from 55·2 in 1911 to 74·1 in 1952.

These increases have been exaggerated by the ageing of the population in the 15-49 group since 1911 which has tended to increase the relative number of women at the older ages within the group, i.e. where the proportion married is greater. To remove this distortion a marriage index for the year can be calculated by expressing the actual number of married as a ratio to the number which would have emerged as married, if the populations in the component quinary age-groups had been subject to standard proportions married in those age-groups, viz: those for 1911. The difference of this ratio from unity thus indicates changes in the proportions married apart from that due to ageing.

Marriage indices standardised on 1911 proportions married within successive quinary age-groups from 15 to 49, with the corresponding unstandardised figures, are shown below:—

	1911	1931	1938	1946	1947	1948	1949	1950	1951	1952
Standardised ...	1·000	1·022	1·067	1·146	1·154	1·168	1·180	1·188	1·200	1·212
Unstandardised	1·000	1·054	1·127	1·247	1·265	1·281	1·297	1·309	1·327	1·341

The correction for ageing shows that the true increase in the proportion married among the women aged 15-49 between 1911 and 1952 was 21·2 per cent instead of the 34·1 per cent suggested by the crude proportions, over one third of the latter increase being due to the ageing of the population and unrelated to the incidence of marriage. If comparison is confined to the narrower age group 20-39 where clearly the effect of ageing is correspondingly restricted standardisation only reduces the excess of 1952 over 1911 from 34·2 per cent to 29·1 per cent.

The fact that such a high degree of marriage has been attained is important. There is no sign yet of any recession in the proportions. On the contrary it would not be necessary for rates of new marriages to be as high as in the years immediately preceding 1951 to achieve further increases in the proportion of married women in the population aged 15-49. The marriage rates experienced before the war would not however suffice for this purpose. This may help to put the reductions in some of the specific marriage rates in 1952 in proper perspective.

Seasonal Incidence of Marriage

Table D of Part II, 1952, shows the number of marriages registered in England and Wales and the rates per 1,000 population in each quarter in serial form for decennial periods from 1841 and for each year 1941 to 1952. In the same volume the monthly incidence for marriages is shown for each year 1947 to 1952 in Table N.

Throughout the nineteenth century the highest marriage rates occurred consistently in the December quarter and the lowest in the March quarter. Between the two World Wars a new pattern emerged and almost without exception the two summer quarters became the highest and the two winter quarters the lowest. The March quarter has generally been that of lowest marriage incidence, but the incidence rises and relativity is disturbed when the Easter happens to fall within that quarter.

Since the Second World War, in addition to the temporary shift from the June to March quarters in the years when Easter fell in the March quarter, there has also been a transference of marriages from the June to March quarters of a more permanent and progressive character. The fortuitous disturbance of two March Easters in this short period obscures this trend and an approximate removal of this disturbance is desirable to clarify the picture.

In pre-war years, the last two March Easters occurred in 1932 and 1937. The incidence of marriages in the March and June quarters in these years and in those immediately preceding and succeeding them, expressed as a percentage of one fourth of the annual total of marriages, was as follows:—

Year	March Qtr.	June Qtr.	Year	March Qtr.	June Qtr.
1931	60	109	1936	56	114
1932	81	90	1937	79	89
1933	57	108	1938	58	113

According to these data, a March Easter leads to a transfer of an average of 22 from the June to the March quarter index. This adjustment has been made to the figures for 1948 and 1951 (when Easter fell in the March quarter), to provide the following set of figures from 1946 to 1952, (again related to a quarterly average of 100). These indices are comparable in the sense that they have been freed from Easter disturbance.

Year	1946	1947	1948	1949	1950	1951	1952
March Quarter ...	81	75	74	87	97	100	122
June Quarter ...	105	109	116	102	90	96	80

The possible weakness of the assumption on which the 1948 and 1951 figures have been adjusted, namely that the effect of a March Easter in these years was the same as in 1932 and 1937, must be borne in mind but it is evident that a persisting change has been taking place since 1947 or 1948. The monthly incidence of marriages, available for the years from 1947, throws some further light on this. Account must however be taken of the varying lengths of months by calculating daily averages, and Table XXIX shows daily average of marriages registered in England and Wales in each month and the ratio of the daily average for the month to the daily average for the year from 1947 to 1952.

By comparing 1947 and 1952 for instance, two years in which Easter fell in April, or 1948 and 1951 when Easter fell in March, it may be seen from this table that all the increase in the March quarter is concentrated in the month of March, while the complementary decrease in the June quarter is spread from April to June. This supports the popular explanation of the shift, namely that it is attributable to the method by which the Inland Revenue calculate a wife's allowance in Income Tax assessment. This system favours marriage before, rather than after, the beginning of the financial year (very early in April). This advantage apparently attracts many of those who would otherwise have married early in the financial year and up to as late as June.

Table XXIX.—Comparison of Marriage Incidence by calendar months, 1947 to 1952, England and Wales

	Daily Average number of Marriages in each month						Ratio of Daily Average for the month to daily average for the year taken as 1,000					
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
January	641	741	696	497	464	451	583	684	677	506	470	473
February	798	711	796	773	639	787	726	656	774	787	647	825
March	1,065	1,673*	1,223	1,608	2,493*	2,253	969	1,543*	1,190	1,637	2,523*	2,362
April	1,387	858	1,308	1,047	475	743	1,262	792	1,272	1,066	481	779
May	890	857	527	591	567	571	810	791	513	602	574	599
June	1,332	1,351	1,332	1,033	1,152	983	1,212	1,246	1,296	1,052	1,166	1,030
July	1,174	1,492	1,364	1,204	1,065	1,010	1,068	1,376	1,327	1,226	1,078	1,059
August	1,396	1,140	1,064	1,134	1,139	1,213	1,270	1,052	1,035	1,155	1,153	1,271
September	1,325	1,386	1,304	1,412	1,432	1,151	1,206	1,279	1,268	1,438	1,449	1,206
October	912	911	864	700	681	659	830	840	840	713	689	691
November	913	671	598	563	525	605	831	619	582	573	531	634
December	1,346	1,196	1,244	1,208	1,177	1,006	1,225	1,103	1,210	1,230	1,191	1,055
Year	1,099	1,084	1,028	982	988	954	1,000	1,000	1,000	1,000	1,000	1,000

* Easter fell in March in 1948 and 1951.

Apart from this feature the influence of Easter and Christmas is also clearly discernible in March (or April) and December. The relative incidence is also naturally high in the holiday months, June to September.

Marriage Incidence in different parts of the Country

The number of marriages and the marriage rates in regions, counties and county boroughs for each year are published in Table F of the successive issues of Part II. Up to 1949 classification was by Geographical Regions and from 1950 by Standard Regions, but Appendix F to Part II for 1946 to 1949 provides an additional tabulation by Standard Regions.

It has frequently been stressed in previous Reviews that the significance of differences in local marriage rates is reduced by the fact that the district in which the marriage is registered is often the district of residence of only one of the parties and sometimes of neither, though this weakness would be less in comparisons between large sections of the country than between small local areas. Another difficulty arises from the fact that marriage rates for local areas were calculated upon civilian populations up to 1949, and upon home populations (that is including the armed forces stationed in the area) from 1950, though in these and other years the parties to the marriage would include members of the armed forces, whether stationed at home or abroad. To minimise distortion from this source, ratios of local rates to the national rate for each year may be considered, as shown in Table XXX.

The attraction of London for marriage has always been reflected in the statistics. In the years immediately preceding the war about 12½ per cent of the total marriages of the country were registered in London, giving it a marriage rate about 25 per cent higher than that of the country as a whole. Since the war the London population has remained much below its pre-war level, so that although only 9½ per cent of all marriages are registered in London, the marriage rate is still about 25 per cent above the national level.

Table XXX shows the ratio of marriage rates in Standard Regions to the national rate in the years from 1947 to 1952.

The unique position of London dependent, as it is in part, upon the attraction of a London wedding for those resident elsewhere is an outstanding feature of the table. The rate in the Eastern region, some 12 to 15 per cent below the national average, is also notable. Other rural regions—Southern, South Western and Wales II—also show low rates, 8, 8 and 11 per cent respectively below the average in 1952. There are no other important differences. It may be seen from

Table XXX.—Ratio of Marriage Rates in Standard Regions of England and Wales to that of the whole country, 1947 to 1952.

Region	Ratio of Regional to National Rate taken as 1,000						Ranking of Ratio					
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
England and Wales ..	1,000	1,000	1,000	1,000	1,000	1,000						
Regional Summary												
Northern	1,016	1,018	1,033	1,032	1,031	1,051	3	3	2	2	2	2
East and West Ridings	1,029	1,026	1,037	1,024	1,030	1,025	2	2	1	3	3	4
North Western ..	1,015	1,006	1,017	1,009	1,002	1,005	4	7	6	6	5	6
North Midland ..	1,005	1,013	1,016	1,019	997	994	5	4	7	5	7	7
Midland	967	1,010	1,021	1,021	1,027	1,011	7	6	4	4	4	5
Eastern	872	874	859	866	851	852	11	11	11	11	11	11
London and South Eastern	1,057	1,040	1,028	1,041	1,054	1,055	1	1	3	1	1	1
County of London	*1,280*	*1,247*	*1,225*	*1,237*	*1,253*	*1,253*						
Southern	952	961	950	932	942	924	8	8	8	8	8	8
South Western ..	935	931	922	926	917	917	10	9	9	10	9	9
Wales I	989	1,012	1,018	999	998	1,043	6	5	5	7	6	3
Wales II	945	906	913	930	915	894	9	10	10	9	10	10

the ranking orders on the right hand side of the table that the regions do tend to maintain their relative positions from year to year.

Buildings in which Marriages may be Solemnized

According to returns made to the Registrar General by diocesan registrars, there were, at the end of 1952, 16,774 Churches and Chapels of the Church of England and the Church in Wales wherein marriages could be solemnized.

The following table shows in respect of other religious bodies the number of places of meeting for religious worship, and the number of such places in which marriages could be solemnized, recorded by the Registrar General at the end of 1952.

Table XXXI.—Buildings* certified as places for Worship and registered for Marriages, 1952, England and Wales

Denomination	Buildings certified to the Registrar General as meeting places for Religious Worship	Buildings registered for the solemnization of marriages
Roman Catholics	2,460	2,232
Methodist Church	13,207	9,277
Congregationalists	3,627	3,379
Baptists	3,604	3,291
Calvinistic Methodists	1,424	1,227
Presbyterians	460	451
Unitarians	194	199
New Church	60	63
Catholic Apostolic Church	50	41
Countess of Huntingdon's Connexion	43	39
Salvation Army	1,556	591
Society of Friends	424	†—
Jews	428	†—
Other Denominations	7,758	2,836
All Denominations	**35,295**	**23,626**

* Of these buildings nearly 1,000 were certified before 1852 as places of meeting for religious worship to some other authority than the Registrar General and therefore are not included in the number so certified to the Registrar General shown above.

† It is not necessary for buildings to be registered for the solemnization of Quaker or Jewish marriages.

Manner of Solemnization

The marriages of 1952 are analysed according to manner of solemnization in Appendix B of Part II, Table 5 of which also gives some comparative figures back to 1844. Similar figures were last given in 1934; it is intended to publish them in future at five-yearly intervals.

Of the 349,308 marriages registered in 1952, 106,777 or 306 per thousand were civil marriages and 242,531 or 694 per thousand were solemnized with religious ceremonies. The proportion of civil marriages has risen steadily since their introduction in 1836. Table XXXII shows that in 1844 it was 26 per thousand and in 1929 ten times as high, 257 per thousand, rising in the next five years by a tenth to 284 per thousand in 1934. In the eighteen years since then the increase has been at a slower rate—by about one-thirteenth to 306 per thousand. The proportion varies between different parts of the country. Among Regions it is highest in the London and South Eastern (370 per thousand) and lowest in the North Western (244 per thousand), among counties it is highest in London (440)* and lowest in Radnorshire (106); in Wales, where the proportion was relatively high in 1934 (377 per thousand, a third higher than for England and Wales combined), it has declined steeply to 291 per thousand.

Table XXXII.—Proportion of Civil Marriages and Distribution of Religious Marriages by Denomination, England and Wales, 1844-1952

Year	Civil per 1,000 Total Marriages	Marriages according to Rites of Denominations shown, per 1,000 Marriages with Religious Ceremonies						
		Established Church and Church in Wales	Roman Catholics	Methodists	Congregationalists	Baptists	Other Denominations	Jews
1844	26	932	18	49				1
1849	39	903	31	64				2
1854	48	882	51	65				2
1859	65	869	49	80				2
1864	81	851	52	95				2
1869	95	843	45	110				2
1874	105	834	45	118				3
1879	120	822	46	129				3
1884	131	813	50	134				3
1889	139	811	49	135				5
1894	148	805	49	140				6
1899	150	798	48	147				7
1904	179	782	49	160				9
1909	205	773	53	166				8
1914	241	768	61	162				9
1919	231	776	67	73	31	25	21	7
1924	238	759	72	79	33	26	22	9
1929	257	756	80	76	31	25	23	9
1934	284	747	91	73	30	25	25	9
1952	306	714	136	69	29	22	22	8

The table also shows the distribution of religious marriages among some of the larger denominations. The almost uninterrupted decline in the proportion taking place in the Established Church and the Church in Wales, from 932 per thousand religious marriages in 1844 to 747 per thousand in 1934 and 714 in 1952, is in part simply a reflection of the increase in the numbers of civil ceremonies. But no doubt it is also influenced by changes in the relative strength of

* The figure for London, which is about a fifth greater than the next highest, presumably reflects a stronger tendency in the case of civil than in that of religious ceremonies for those resident elsewhere to come to London for their wedding—cf. p. 51.

Table XXXIII.—Distribution of Religious Marriages by Denomination, England and Wales and Regions, 1952

Area	Marriages according to the Rites of Denomination shown per 1,000 Total Marriages with Religious Ceremonies															
	All Denominations	Established Church and Church in Wales	Roman Catholics	Methodists	Congregationalists	Baptists	Presbyterians	Calvinistic Methodists	Salvation Army	Unitarians	Brethren	Society of Friends	Spiritualists	Other Christian Bodies	Jews	Other Bodies, Unattached
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
ENGLAND AND WALES ...	**1,000**	**714**	**136**	**69**	**29**	**22**	**7·4**	**4·3**	**1·5**	**1·2**	**1·1**	**0·3**	**0·3**	**6·0**	**7·7**	**0·3**
Regions:																
Northern	1,000	687	161	110	8·3	6·4	19	—	1·8	0·8	0·9	0·2	0·3	2·6	1·2	0·4
East and West Ridings ...	1,000	739	105	108	22	10	1·7	—	1·4	2·3	0·5	0·3	0·3	5·7	3·8	0·1
North Western	1,000	607	238	79	31	10	8·4	1·5	1·1	3·8	0·7	0·1	0·1	13·1	5·9	0·4
North Midland	1,000	787	69	82	26	24	3·5	—	1·8	0·8	0·5	0·3	0·2	4·6	0·3	0·2
Midland	1,000	756	138	61	19	12	2·8	0·8	1·0	0·7	0·9	0·3	0·4	5·9	0·9	0·2
Eastern	1,000	795	81	51	34	27	1·9	—	2·4	0·2	1·7	0·3	0·3	3·9	1·1	0·3
London and South Eastern ...	1,000	734	148	34	23	19	8·3	0·2	1·3	0·2	1·0	0·5	0·4	4·5	25	0·3
Southern	1,000	796	98	43	31	19	4·0	—	2·1	—	1·6	0·6	0·3	4·1	0·3	0·4
South Western	1,000	763	71	99	29	26	1·9	—	2·2	0·3	2·7	0·4	0·2	4·1	0·3	—
Wales	1,000	544	85	65	96	108	24	66	1·0	2·0	1·7	—	0·2	5·9	0·8	0·4
Wales I	*1,000*	*559*	*94*	*59*	*96*	*122*	*23*	*33*	*1·3*	*1·3*	*2·3*	—	*0·3*	*7·6*	*1·1*	*0·6*
Wales II	*1,000*	*502*	*59*	*80*	*99*	*71*	*29*	*154*	*0·3*	*3·9*	—	—	—	*1·3*	—	—

Table XXXIV.—Distribution of Marriages in the Established Church and Church in Wales by Type of Preliminaries, and Proportion of Marriages in Registered Buildings before an Authorised Person by Denomination, England and Wales and Regions, 1952

Area	Distribution per 1,000 of Marriages in the Established Church and Church in Wales by Type of Preliminaries						Proportion per 1,000 Marriages of the Denomination shown, solemnized before an Authorised Person						
	All Types	Special Licence	Licence	Banns	Supt. Registrar's Certificate	Not Stated	All Registered Buildings	Roman Catholics	Methodists	Congregationalists	Baptists	Presbyterians	Other Denominations
ENGLAND AND WALES	**1,000**	**0·4**	**84**	**914**	**0·5**	**1·0**	**420**	**142**	**859**	**636**	**539**	**465**	**338**
Regions:													
Northern	1,000	—	94	905	—	0·8	361	14	866	597	605	211	269
East and West Ridings	1,000	0·2	72	927	0·3	0·9	593	219	927	713	702	564	508
North Western	1,000	0·1	110	889	0·3	0·6	348	61	915	776	596	672	582
North Midland	1,000	0·4	83	915	0·5	1·1	671	379	857	853	817	537	320
Midland	1,000	0·1	70	928	0·6	1·3	813	798	907	798	822	556	525
Eastern	1,000	0·3	84	911	3·5	1·3	365	9·1	778	546	441	714	224
London and South Eastern	1,000	1·1	56	942	0·1	0·8	277	12	936	713	564	499	222
Southern	1,000	0·2	89	909	0·1	1·4	365	59	781	660	622	302	179
South Western	1,000	0·8	109	888	—	2·5	433	3·6	685	561	615	517	101
Wales	1,000	—	156	843	0·2	0·6	299	—	639	337	331	441	204
Wales I	*1,000*	—	*142*	*858*	*0·2*	*0·5*	*356*	—	*744*	*414*	*380*	*547*	*307*
Wales II	*1,000*	—	*199*	*799*	*0·5*	*1·0*	*160*	—	*428*	*132*	*97*	*212*	*121*

the various denominations. In the second half of the nineteenth century Free Church marriages rose continuously, both as a proportion of religious and of all marriages. More recently, however, it is the Roman Catholic proportion, previously stable at about 5 per cent of religious marriages, which has been rising, and the 18 years 1934-1952 have seen an outstandingly large increase in it of about one-half, from 91 to 136 per thousand. Of the seven denominational groups identified in Table 5 of Appendix B, in Part II, the Roman Catholic Church is the only one during this period to show an increase in the proportion of its marriages to the total including those with civil ceremonies. This increase is unevenly spread over the various parts of the country, being proportionally greater in some of the rural counties to the North-East of London, as well as Buckinghamshire and Cornwall,* and smaller in the big industrial areas such as Lancashire, the West Riding and London.

Tables 1 and 2 of Appendix B also give some guide to the strength of various denominations in different parts of the country (Regions and Counties) to the extent only to which this is very roughly indicated by marriage incidence, though close comparison is, of course, not possible between the smaller numbers subject to much chance fluctuation from one year to another. Table XXXIII summarises the proportions of 15 denominational groups among total religious marriages by Region. The proportions for the Established Church and the Church in Wales are highest in the Southern, Eastern and North Midland Regions (nearly 80 per cent) and lowest in North and Central Wales (about 50 per cent). The proportions for the Roman Catholic Church are also lowest in the latter area and highest in the North West where there is a considerable Irish population. The Methodist proportion is highest in the North, including the whole of Yorkshire, and in the South West, especially in Cornwall (where it is 30 per cent); the Congregationalist, Baptist, Presbyterian and Calvinistic Methodist proportions are highest in Wales (the last-named Church is almost entirely concentrated there) and the Jewish proportion is highest in the London area.

Tables 3 and 4 in Appendix B and Table XXXIV show, for England and Wales and for each Region, the distribution of marriages in the Established Church and the Church in Wales by type of preliminaries and that of marriages in registered buildings according to whether they were solemnized before a Registrar or an Authorised Person.†

The great majority of marriages in the Established Church and the Church in Wales are solemnized after banns. The proportion by licence is generally about 10 per cent or somewhat less (especially in the London and South-Eastern Region—5½ per cent), but in Wales it is rather higher, especially in North and Central Wales where it reaches 20 per cent. The proportion with civil preliminaries (Superintendent Registrar's Certificate) is negligible.

The proportion of marriages in registered buildings which were solemnized before an Authorised Person instead of a Registrar was 42 per cent for the country as a whole, but varies considerably between different parts of the country and even more between different denominations. These two types of variation are not, of course, independent; thus the proportions are generally low in Wales, especially Wales II (North and Centre), while the Calvinistic Methodists, who are concentrated there and form the bulk of the "Other Denominations" in Wales II, have a very low proportion among denominations generally. Very low also is the national proportion among Roman Catholics

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* It is possible that in some of these counties immigration from predominantly Roman Catholic countries such as Poland was a contributory factor.

† A person authorised to register marriages by the governing body of the registered building, and certified as such to the Registrar General, under the provisions of the Marriage Act, 1898, re-enacted in the Marriage Act, 1949.

(14 per cent), while among the Methodists it is particularly high (86 per cent). The proportion of such marriages is naturally dependent on the provisions made by the governing bodies of buildings, and the following statement compares some of the marriage figures with corresponding proportions of registered buildings having an Authorised Person in 1951 (the last year for which they are available).

Percentage of Registered Buildings in 1951 for which an Authorised Person had been appointed, and of Marriages in 1952 before an Authorised Person, by Denomination, England and Wales

Denomination	Buildings 1951	Marriages 1952
Total	**36**	**42**
Roman Catholics	10*	14
Methodists ...	58	86
Congregationalists	37	64
Baptists ...	29	54
Others	14*	38

* Approximate.

Marriages of divorced persons in 1952 by manner of solemnization are shown in Appendix A on p. 252.

Signature by Mark

Some evidence on the extent of illiteracy is contained in the last three columns of Appendix B, Table 1 in Part II, which show the numbers of persons who signed the marriage register by making a mark. The following table shows how the numbers have decreased since 1914.

Year	Man only	Woman only	Both Parties	Total Persons signing by mark
1914 ...	2,322	2,819	537	6,215
1919 ...	2,463	2,433	520	5,936
1924 ...	995	1,041	215	2,466
1929 ...	774	776	141	1,832
1934 ...	463	427	84	1,058
1952 ...	67	58	34	193

It will be seen that the numbers have dwindled to insignificant proportions. They are now so small that they are likely to reflect marriages of persons who are blind or otherwise handicapped (perhaps only temporarily) quite as much as those of illiterates.

WIDOWHOOD AND WIDOWERHOOD

Detailed commentary on widowhood and widowerhood was included in the 1940-1945 Civil Text, pages 47 to 52, to which reference should be made for an introductory discussion on the peculiarities of these statistics with special reference to the alternative classes of "not stated" cases which may arise and such sources of information as there are on these cases. In that commentary the concept of widowhood rates (defined as "The number of widows in a given age group, produced by the death of a husband in the current year, expressed as a proportion of all wives of that age") was introduced, and it is retained in the present commentary. A similar concept applies to widowerhood. Further commentary was contained in the 1946-1950 Civil Text on pages 51 to 53 and in the 1951 Text on pages 78 and 79.

In Table SS of Part II the number of marriages terminated by the death of a spouse are given by joint ages of the deceased and the surviving spouse. Only cases of deaths in which marital condition was stated are included in the table, but the proportion of "not stated" to "stated" marital condition is given for each age of deceased. It has been a feature of these statistics, since they were first collected in 1938, that this "not stated" proportion has been very low for female deaths, a small fraction of one per cent, but has been substantial for male deaths, particularly for ages under 30. Table XXXV shows the "not stated" proportions for males for the years 1938 and 1945 to 1952.

Table XXXV.—Percentage "Not Stated" to "Stated" marital condition—Deceased Men, 1938 and 1945 to 1952, England and Wales

Age of Deceased	1938	1945	1946	1947	1948	1949	1950	1951	1952
All Ages ...	8·2	5·4	5·5	5·5	5·4	5·0	4·9	4·9	4·5
15–	22·7	13·8	15·3	13·8	10·8	12·8	19·6	14·8	8·7
20–	40·4	15·0	20·7	28·8	27·7	28·9	40·4	47·2	49·3
25–	31·5	14·1	21·2	24·6	22·8	24·8	28·6	35·1	34·3
30–	28·6	16·0	20·5	20·3	20·0	19·7	19·7	21·7	23·9
35–	22·2	14·7	16·2	16·3	16·4	16·2	14·8	16·3	17·4
40–	17·4	12·2	13·7	14·7	13·1	12·6	12·4	12·0	12·3
45–	16·5	10·1	9·9	11·0	9·7	9·8	9·5	9·3	8·6
50–	12·6	8·3	8·2	8·2	8·5	7·3	6·8	7·0	6·4
55–	10·3	7·1	6·6	6·7	6·8	5·9	5·7	5·3	5·3
60–	8·3	5·8	6·0	5·9	5·6	5·0	4·8	4·9	4·3
65–	6·2	5·0	4·6	4·9	4·6	4·0	3·9	4·0	3·6
70–	5·2	4·5	4·4	4·3	3·9	3·5	3·4	3·5	3·1
75 and over	4·3	4·1	4·0	3·8	3·5	3·4	3·4	3·2	2·9

From 1938 to 1945 there was a more or less general and steady decrease in the percentage " not stated ". It may be seen from Table XXXV that since 1945 there has been a tendency for the percentage to continue decreasing at ages over 45, but to increase at ages under 40, and in 1952 at ages 20-24 and 25-29 the percentages exceeded those originally recorded in 1938. Failure to indicate marital condition is more likely for bachelors than for married men whose widows are commonly the informants. If this is so, proportional allocation of the non-stated cases will lead to some bias, and to this extent the rates for males given later must be accepted with some caution at the younger ages.

Table XXXVI.—Widowerhoods per 1,000 Married Men and Widowhoods per 1,000 Married Women, in each age group, 1939, 1946-1949 and 1950 to 1952, England and Wales

Age of Surviving Spouse	1939	1946-49	1950	1951	1952	1939	1946-49	1950	1951	1952
	Widowerhoods per 1,000 Married Men					Widowhoods per 1,000 Married Women*				
All Ages ...	8·7	7·5	7·5	7·8	7·0	14·3	13·4	13·8	14·8	13·6
Under 25 ...	2·1	1·5	1·0	·8	·7	1·8	1·2	1·0	·9	·9
25–	2·3	1·5	1·1	·9	·8	2·0	1·7	1·4	1·3	1·2
30–	2·3	1·6	1·3	1·1	1·0	2·8	2·2	1·9	1·9	1·8
35–	2·8	2·0	1·6	1·5	1·4	4·4	3·3	3·0	3·1	2·9
40–	3·6	2·5	2·2	2·2	2·0	6·6	5·3	4·9	5·1	4·7
45–	4·9	3·9	3·6	3·4	3·1	10·3	9·1	8·7	8·8	8·2
50–	7·4	5·8	5·4	5·5	5·2	16·0	14·3	14·2	15·6	14·2
55–	10·5	8·7	8·4	8·6	7·5	22·9	21·1	21·6	23·3	21·5
60–	16·5	13·8	13·2	13·9	12·3	35·0	32·9	33·6	37·8	32·8
65–	24·8	21·0	21·1	21·8	19·7	49·6	46·6	49·1	53·8	48·0
70–	37·3	32·6	34·2	35·9	31·6	72·1	69·3	71·7	72·3	69·4
75 and over ...	73·3	57·9	61·0	66·1	57·9	126·4	92·5	106·5	118·6	106·5

* Non-civilian casualties were not classified by marital condition before 1950. An approximate allowance has been made for them by rateable allocation in earlier years.

Table XXXVI shows widowhood and widowerhood rates by age for selected periods from 1939 to 1952. These rates are different in character from published death rates because they derive solely from the deaths of married persons and the latter represent selected lives mainly because they exclude persons whose health denies them the opportunity of marriage. Nevertheless these rates reflect in general the sex and age distribution and annual changes of mortality rates and much of the commentary on mortality rates contained in the medical parts of this Review is relevant to them.

For demographic purposes, however, it is not the nature of small differentials within the main structure of widowhood and widowerhood rates that is important, but the general level of these rates. It is clear that the current level of mortality at ages under 45, is so low that the termination of marriages by the death of one or other of the partners is not significantly depleting the younger married population or, in particular, the population of married women in the reproductive ages.

DIVORCES AND REMARRIAGES OF DIVORCED PERSONS

Divorce

Divorce statistics were shown in Tables O and P in Part II up to 1949, and more detailed statistics have been shown in Tables O and P1 to P4 since 1950. A detailed analysis of and commentary on divorce statistics was included in the 1946-50 Civil Text on pages 54 to 73 and in the 1951 Text on pages 80 to 82.

For the study of the trend of divorce statistics it is better to examine the annual incidence of petitions filed, rather than of decrees absolute granted, since the former are less liable to disturbance from purely administrative changes in procedure and also respond more quickly to real changes in influences tending to change the incidence of divorce.

During the period 1938-1950 the annual incidence of petitions for divorce underwent violent fluctuations, mainly attributable to the direct effect of the war. By 1950 it seemed that the force of this violent change had passed and that 1951 would see the completion of post war re-adjustment or even a resumption of the more normal long-term trend. However a disturbing factor was introduced on 2nd October, 1950, by the Legal Aid and Advice Act, 1949, which extended the facilities for divorce of persons of limited means. The trend of the incidence of divorce over the period 1950-52 may therefore be compared on the one hand with that in the years following the First World War, and on the other hand with that in the years around 1926 when the Poor Persons Rules, 1925, came into opera-

Table XXXVII.—Petitioning for divorce and Decrees Absolute granted, 1918 to 1930 and 1945 to 1952, England and Wales

Year		Divorce Petitions filed (dissolution and nullity)	Decrees Absolute granted (dissolution and nullity)	Year		Divorce Petitions filed (dissolution and nullity)	Decrees Absolute granted (dissolution and nullity)
(End of First World War)	1918	2,362	1,082	(End of Second World War)	1945	25,711	15,634
	1919	5,184	1,629		1946	43,163	29,829
	1920	4,565	3,041		1947	48,501	60,254
	1921	2,907	3,458		1948	37,919	43,698
	1922	2,462	2,509		1949	35,191	34,856
	1923	2,833	2,586		1950	29,729	30,870
	1924	2,978	2,249	(Legal Aid and Advice Act, 1949)†	1951	38,382	28,767
	1925	3,054	2,563		1952	34,567	33,922
(Poor Persons Rules, 1925)	*1926	3,631	2,554				
	1927	4,294	3,124				
	1928	4,050	3,927				
	1929	3,997	3,333				
	1930	4,288	3,482				

* Came into operation on 6th April, 1926.

† Came into operation on 2nd October, 1950.

tion—Rules which in some respects disturbed divorce incidence in a manner similar to that which may be expected from the operation of the Legal Aid and Advice Act, 1949. In TableXXXVII is shown the number of petitions filed and decrees absolute granted in each year from 1918 to 1930 and from 1945 to 1952.

After the First World War, the incidence of divorce petitioning rose steeply to a peak in 1919 and then rapidly declined. After 1922 the numbers increased more or less steadily but gradually each year, until the introduction of the Poor Persons Rules, 1925, intervened. After the Second World War the numbers of petitions involved each year was about ten times as great as before but, so far as has yet been revealed, the pattern followed has been somewhat similar. After a steep rise a peak of over 48 thousand petitions was reached in 1947, and a steep decline had brought the figure down to 30 thousand by 1950. It does not seem unreasonable to assume that, in the absence of the Legal Aid and Advice Act, 1949, or any other disturbing factor, a figure slightly in excess of 30 thousand might have been recorded in 1951.

Whereas the Legal Aid and Advice Act, 1949, positively increased the facilities for divorce available to persons of limited means,the Poor Persons Rules, 1925, merely altered the procedure by which the then existing facilities were made available. Nevertheless it is thought that their influence may have been similar in some respects since, as a result of publicity, they enhanced existing facilities by making those requiring help aware of its availability. An examination of the petitions filed in the years from 1925 to 1930 in Table XXXVII will show that the introduction of the Rules led to a steeper rise in the annual incidence of divorce petitioning than was experienced from 1922 to 1925, though far less steep than that immediately following the war. After a minor peak, there was a decline to 1929, after which a gradually increasing trend was again resumed. Close similarity to this experience must not be expected in the years following 1951, since for one thing the two procedures were introduced in widely different months—April and October, but at least a peak, a decline, and the later resumption of a rising trend may be expected in the absence of further disturbing factors.

The difficulty, to which attention was drawn above, in following the trend of divorce from the incidence of decrees absolute may be seen from Table XXXVII. The peak in divorce petitioning after the First World War was reached in 1919; the peak in the granting of decrees absolute was not reached until two years later. Following the introduction of the Poor Persons Rules, 1925, a peak in petitioning was reached in 1927, but not until the next year was the peak reached in the granting of decrees absolute. Since the Second World War a number of changes have been made in the procedure for obtaining a decree absolute and their influence may be seen from the violent fluctuations in the incidence of decrees absolute in the period 1945 to 1952. A more detailed discussion of these events was included in the 1946-50 Civil Text on pages 54 to 57.

A detailed analysis and commentary on divorce rates by current ages of husband and wife in combination, by current age of wife and duration of marriage, by age of wife at marriage and duration of marriage and by current age of wife and size of family was included in the 1946-50 Civil Text on pages 62 to 67.

Remarriage of Divorced Persons

One aspect of divorce which is of importance is its impact upon the number of married persons in the population and thus upon the incidence of legitimate births. It is, however, necessary to examine together the incidence of divorce and of remarriage of divorced persons since only the net effect of these two forces actually reduces the married population.

The general trend of the numbers of married persons who were divorced and of divorced persons who remarried is shown in Table XXXVIII.

Table XXXVIII.—Annual Number of Persons Divorced and of Divorced Persons who Remarried, 1926 to 1952, England and Wales

Period	Number of persons divorced in the period	Number of divorced persons who remarried in the period							
		Persons	Men	Women	Divorced men marrying spinsters	Divorced men marrying widows	Divorced men and women inter-marrying	Divorced women marrying bachelors	Divorced women marrying widowers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1926–30 Averages	6,716	3,917	2,128	1,789	1,662	270	392	1,225	368
1931–35 Averages	8,022	5,154	2,777	2,377	2,179	302	592	1,597	484
1936–40 Averages	12,361	8,558	4,580	3,978	3,641	464	949	2,746	758
1941–45 Averages	20,778	12,548	7,093	5,455	5,453	874	1,532	3,587	1,102
1946–50 Averages	79,803	48,898	26,273	22,625	17,767	3,303	10,406	14,271	3,151
1936	8,114	8,468	3,507	2,961	2,788	354	730	2,009	587
1937	9,772	6,988	3,759	3,229	2,964	374	842	2,192	616
1938	12,500	8,179	4,404	3,775	3,467	471	932	2,576	733
1939	15,910	10,698	5,715	4,983	4,558	550	1,214	3,480	896
1940	15,510	10,458	5,514	4,944	4,430	571	1,026	3,474	957
1941	12,736	9,378	5,091	4,287	4,028	575	976	2,900	899
1942	15,236	9,706	5,437	4,269	4,214	664	1,118	2,815	895
1943	20,024	11,049	6,157	4,892	4,712	797	1,296	3,237	1,007
1944	24,624	13,728	7,914	5,814	6,009	981	1,848	3,693	1,197
1945	31,268	18,879	10,867	8.012	8,303	1,355	2,418	5,292	1,511
1946	59,658	29,636	16,479	13,157	11,781	2,287	4,822	8,596	2,150
1947	120,508	56,945	30,751	26,194	21,272	3,980	10,998	17,277	3,418
1948	87,396	58,728	31,201	27,527	21,072	3,812	12,634	17.541	3,669
1949	69,712	51,494	27,645	23,849	18,150	3,400	12,190	14,435	3,319
1950	61,740	47,687	25,290	22,397	16,558	3,038	11,388	13,503	3,200
1951	57,534	44,171	23,110	21,061	14,809	2,880	10,842	12,524	3,116
1952	67,844	46,098	23,719	22,379	14,861	2,965	11,786	13,071	3,415

Expressed as percentages of the number of persons divorced in the same period the averages for the quinquennial periods 1926-30 to 1946-50 and the single years 1947 to 1952 of remarriages of divorced persons (columns (2) and (3) of Table XXXVIII) were:—

1926-30	1931-35	1936-40	1941-45	1946-50
58·3	64·2	69·2	60·4	61·3

1947	1948	1949	1950	1951	1952
47·3	67·2	73·9	77·2	76·8	67·9

Divorced persons who remarry during any period are not confined to those granted a decree absolute during the same period, so that the above figures do not precisely represent the proportion of divorced persons who ultimately remarry. Most of these figures will understate the true proportion, though perhaps not by a substantial amount when the rate of increase of divorces is slow. Some of the figures for single years after the abrupt peak in divorce incidence in 1947 may, however, overstate the proportion. The decline in the proportion from 1950 to 1952 suggests that more stable figures—continuing the trend from 1926 to 1940—may soon be recorded. The figures suggest that the proportion of divorced persons who ultimately remarry is rising, and is perhaps in the region of two thirds to three quarters, so that the net loss to the married population is only a small fraction of the total number divorced.

Throughout the period covered by Table XXXVIII the number of divorced men who remarried exceeded that of divorced women who remarried, the latter being about 86 per 100 men. The percentage ratios of divorced women to divorced men among those remarrying rose slightly between 1926-30 and 1936-40 from 84·1 to 86·9, fell to 76·9 in 1941-45, rose to 86·1 in 1946-50, 91·1 in 1951 and 94·4 in 1952.

The divergence from the general trend in 1941-45 is shown in detail in the following statement:—

Divorced women remarrying per 100 divorced men remarrying:—

(Columns (4) and (5) of Table XXXVIII)

1938	1939	1940	1941	1942	1943	1944	1945
85·7	87·2	89·7	84·2	78·5	79·5	73·5	73·7

1946	1947	1948	1949	1950	1951	1952
79·8	85·2	88·2	86·3	88·6	91·1	94·4

The sharp rise in 1939 and 1940 might be attributable to the operation of the Matrimonial Causes Act, 1937. After 1940 the ratios fell to a low level in 1944 and 1945 and then recovered each year so that the average for the period 1941 to 1952 as a whole was 86·0 per cent, indicating that the relative excess of divorced women remarrying in the years 1948 to 1952 almost compensated for the deficiency in the period 1941 to 1946. An alternative explanation of the high percentages recorded since 1947 is that changed conditions are leading to a fundamental change in the ratio. The change in the sex ratio amongst the non-married population, referred to on page 41, may be a contributory factor.

A more detailed analysis and discussion of the remarriage of divorced persons was included in the 1946-50 Civil Text on pages 67 to 72.

GENERAL MORTALITY

Numbers of Deaths

Deaths registered in England and Wales in 1952 totalled 497,484, compared with 549,380 in 1951 (a year of considerable influenza mortality) and 510,301 in 1950. Deaths of males in 1952 numbered 257,760 and of females 239,724. The deaths of non-civilians, registered in England and Wales, have been included in all tables since 1950. They were excluded from certain tables during the years 1939 to 1949.

Death Rates

Crude death rates represent the total number of deaths at all ages from all causes or from a specified cause registered during the year as belonging to the area in question after correction for transfers to the place of residence of the deceased, per thousand or per million of the corresponding estimated resident population at the middle of the year. Use of the mid-year population involves the assumption, tenable at the present time, that the population resident in the area was either stationary or changing at a uniform rate throughout the year.

Death rates by sex, age, and civil condition are calculated in respect of all or specified causes by dividing the number of deaths of persons in the selected group by the corresponding number of persons in the mid-year population, the rate being expressed per thousand or per million. Exceptions to the use of the estimated populations as denominators are the various rates of infant mortality, which are based on appropriate numbers of live births (page 86), and rates of stillbirths and of maternal mortality which are based upon total numbers of births, live and still.

Standardized Death Rates are of two types, those used for the comparison of mortality trends in a given area over the course of some years and those used for comparison of death rates in different areas in a given year. For the former purpose use is made of the **Comparative Mortality Index,** which has replaced the standardized death rate in use until 1941, for the measurement of mortality trends from all causes (Table 3 of Part I) and from selected causes (Tables 6 and 9 of Part I). The methods of calculation and a discussion of its advantages over the former standardized rate may be found on pages 6-11 of the Text for 1940-45 (Volume I, Medical). Briefly it represents the ratio between adjusted death rates of the year in question and of a base year (at present 1938), each calculated by weighting the death rates of the various sex-age groups by the means of the corresponding proportions of the populations living in the two years. If the death rate experienced by a sex-age group in the year to which the index relates is denoted by m, and the corresponding rate in 1938 by m′, and if r and r′ are the *proportions* of the total population falling within that group

$$\text{C.M.I.} = \Sigma m\,(r + r')/\Sigma m'\,(r + r')$$

where Σ denotes summation over all the sex-age groups.

For standardized comparison of death rates from all causes in different areas use is made of **Area Comparability Factors** (A.C.F.) (Table 12 of Part I) which are calculated by a method of indirect standardization and which, when applied to the local crude death rates, produce adjusted rates that can be compared directly with the rate for England and Wales as a whole in the same year (page 67).

Adjusted ratios of male to female mortality (Table 3 of Part I) are derived by a formula similar to that for the C.M.I., in which m and r refer to males, and m′ and r′ refer to females, each in the year to which the ratio applies.

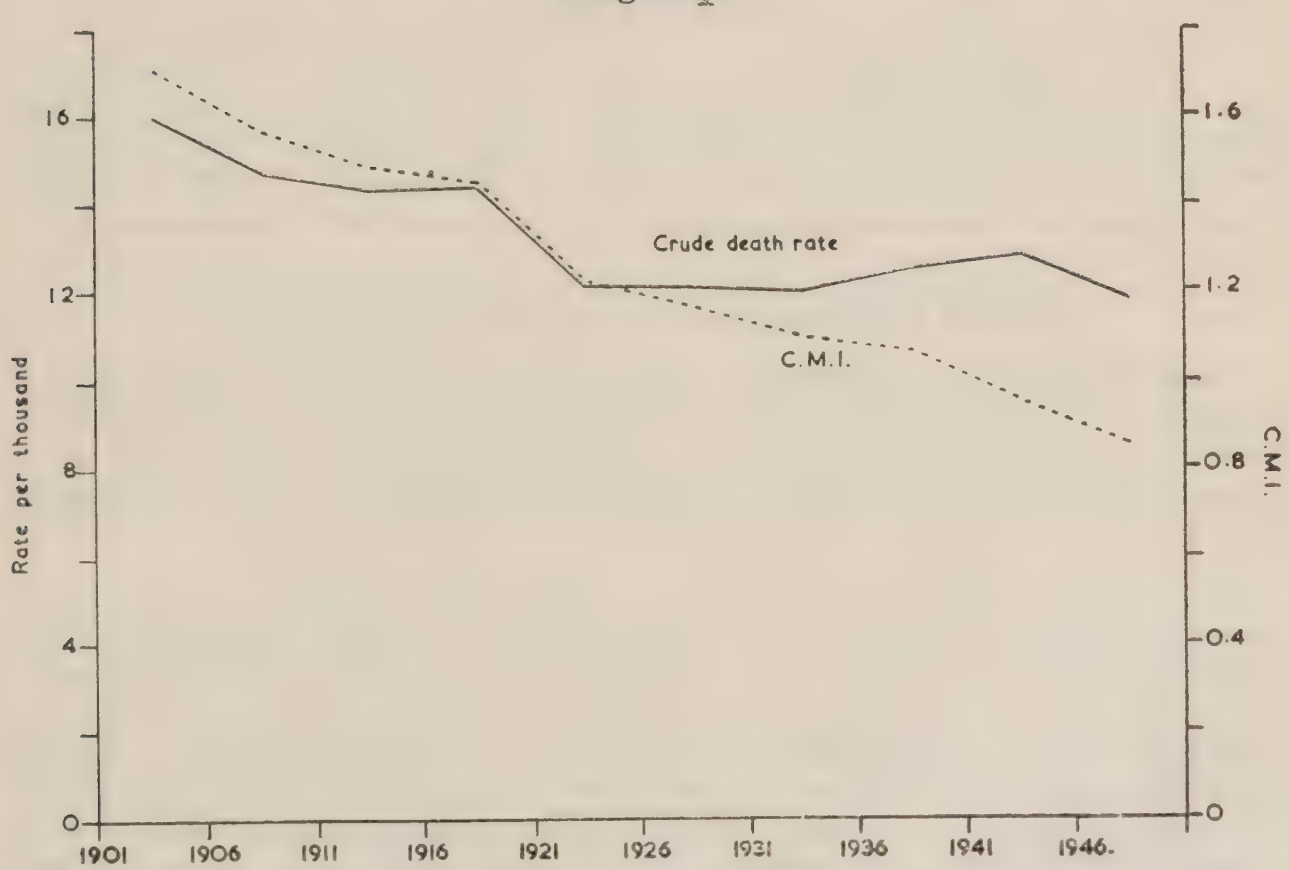
The **Equivalent Average Death Rate** (E.A.D.R.) shown in certain tables in this volume is the arithmetic mean of the rates at quinquennial groups of ages over some convenient range of ages, e.g., 0-4, 5-9, up to 60-64, this being equivalent to calculating a standardized death rate at ages under 65 based upon a population uniformly distributed over the 13 age groups.

The General Trend of Mortality

Table XXXIX (page 71) shows for each sex (*a*) the crude death rate for all ages and (*b*) the comparative mortality index for all ages, from 1841 to 1952.

The crude death rate fell by about the same amount in each sex from 1861 to 1921, but since then little further decline has been recorded. The rates of 12·2 (male) and 10·5 (female) in 1952 were lower, but only slightly lower, than the majority of the rates recorded during the previous thirty years. The combined rate for the two sexes, 11·3, has been bettered only in 1948 (11·0) but a rate of 11·4 was recorded in 1930. The crude death rate gives little indication of declining mortality during recent decades, and its annual variations reflect mainly the effects of mild (1948) or cold (1947) winters and periodic epidemics of influenza (1951). Apart from such fluctuations the level of the crude death rate is much influenced by the increasing proportion of old people in the population, whose inevitably high mortality keeps up the average rate when all ages are combined. When allowance is made by means of the C.M.I., for the ageing of the population a much more satisfactory trend of national mortality emerges, indicating an improvement of 16 per cent for males and of 22½ per cent for females since 1938, and of nearly double those percentages since 1921.

Diagram 2



Crude death rates and C.M. I's. in successive five-year periods, 1901 to 1951

Expectation of Life

The Expectation of Life is the average number of years of life that will be lived by a group of people of given age subject to a given mortality experience, usually the mortality experience of a selected year or period of years, if that experience is reproduced in the future. The basis of the calculation of expectation of life is the Life Table.

No full English Life Table has been published since 1931 but in continuation of the series a 1951 table will be published in due course. Abridged life tables have been published in this Review from 1946 to 1951 and Table XL (page 72) gives an abridged life table for the three years 1950-52. Expectation of life at birth was 66·47 years for males and 71·48 years for females. Corresponding figures from English Life Table No. 10 (1930-32) were 58·74 for males and 62·88 for females, and there has therefore been an increase in expectation of life *at birth* of just under eight years for males and over eight years for females. The increase in expectation of life at advanced ages has not changed much during the twenty years; for example at age 65 that for males increased from 11·30 in 1931-32 to 11·73 years in 1950-52 and for females from 13·07 to 14·29 years. Expectations of life at birth and at age 1 year since 1841 are shown in Table XLI (page 73).

Death Rates by Sex and Age

The trend of male and female mortality at different ages since 1841 is shown in Table XLIII (page 74), and more details are available in Table 3 of Part I. Improvement in mortality has been much greater at younger than at older ages; and at each age it has been greater amongst females than males. The table below shows death rates in 1952 as percentages of those in 1901-05:—

	All Ages	0–	5–	15–	25–	45–	65–	85 and over
Males ...	71	13	18	30	28	60	87	97
Females ...	70	12	13	19	25	44	69	85

Seasonal Variations by Sex, Age, and Cause of Death

Death rates in each quarter since 1931 are given in Table XLII (page 73), and monthly numbers of deaths from a large number of causes are detailed in Table 23 of Part I (all ages). For a number of conditions that show some seasonal variation in mortality at all ages special tables have been prepared to compare these variations at different ages (Table XLIV, page 75).

Fifty-nine per cent of the year's total deaths from respiratory tuberculosis occurred during the March and December Quarters, and the proportion was much the same at each age over 15. Similarly there were no substantial differences with age in the seasonal distribution of deaths from cancer of lung, arteriosclerotic and degenerative heart diseases, pneumonia, bronchitis, ulcer of duodenum, or suicide. There was an excess during the June and September Quarters of deaths from motor vehicle traffic accidents and accidental falls at ages under 45, but an excess of deaths from these causes during the March and December Quarters at ages 45 and over.

Comparative Mortality in Different Parts of England and Wales

As indicated above (standardized death rates, page 64), the death rate (all causes) for local areas can be compared, making allowances for local sex and age differences of population, by means of comparability factors given in Table 12 of Part I. When multiplied by the appropriate comparability factor local rates can be compared with one another and with the rate for the country as a whole.

The use of comparability factors for the standardization of local death rates was introduced in 1934, and a description of methods of standardization for area comparisons is given in the Review for that year (Text, page 4), together with an account of the new method and the reasons for its introduction. The populations used as a basis for the factors for 1952 were derived from the 1947 sex-age estimates.

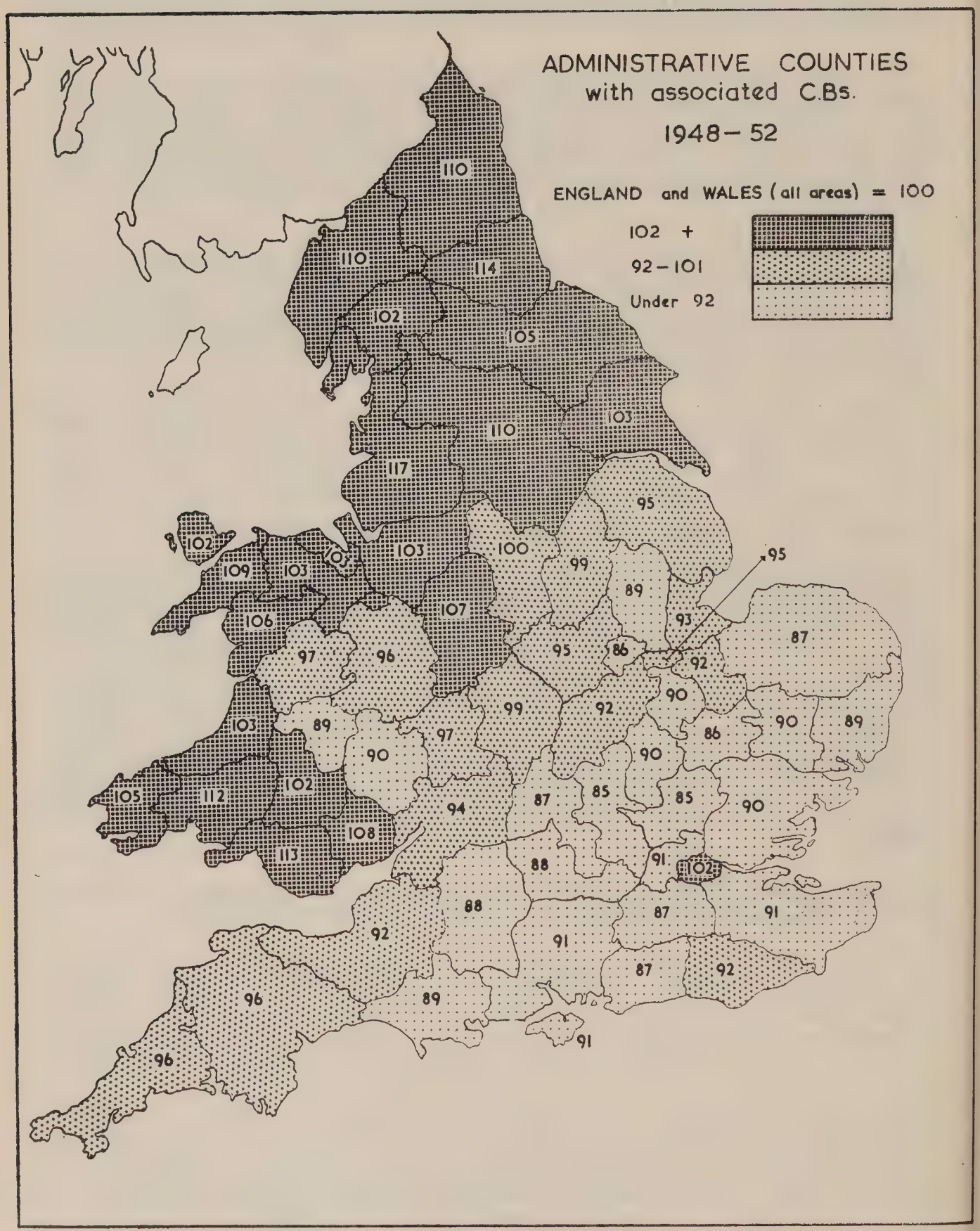
The comparability factors shown in Table 12 (Part I) were calculated on the basis of deaths from all causes and should be used only for the adjustment of death rates relating to all causes. For area comparison of mortality from particular causes a special series of comparability factors would have to be calculated based on mortality from these causes.

Table 12 (Part I) gives, for every administrative area in the country, the ratio of the local adjusted death rate (all causes) to the national rate for the same year, and averages of these ratios for the five years 1948-52 are given in Table XLV (page 76) in respect of administrative counties with associated county boroughs, and of county urban districts, and county rural districts.

The three maps based on this table (Diagrams 3, 4 and 5) all present much the same picture. In urban districts and in rural districts the levels of mortality (standardized for sex and age) tend to arrange themselves into three broad bands that run across the country from south west to north east. The highest levels of mortality are found in most of Wales and in the northern counties of England. Counties with intermediate levels of mortality, both in their urban and their rural components, are distributed in a line running from Cornwall northwestwards through the Midlands and on towards the Humber and the Wash. The third area, of low mortality, starts on the south coast at Dorsetshire and likewise runs north west to include the home counties and continues on towards East Anglia.

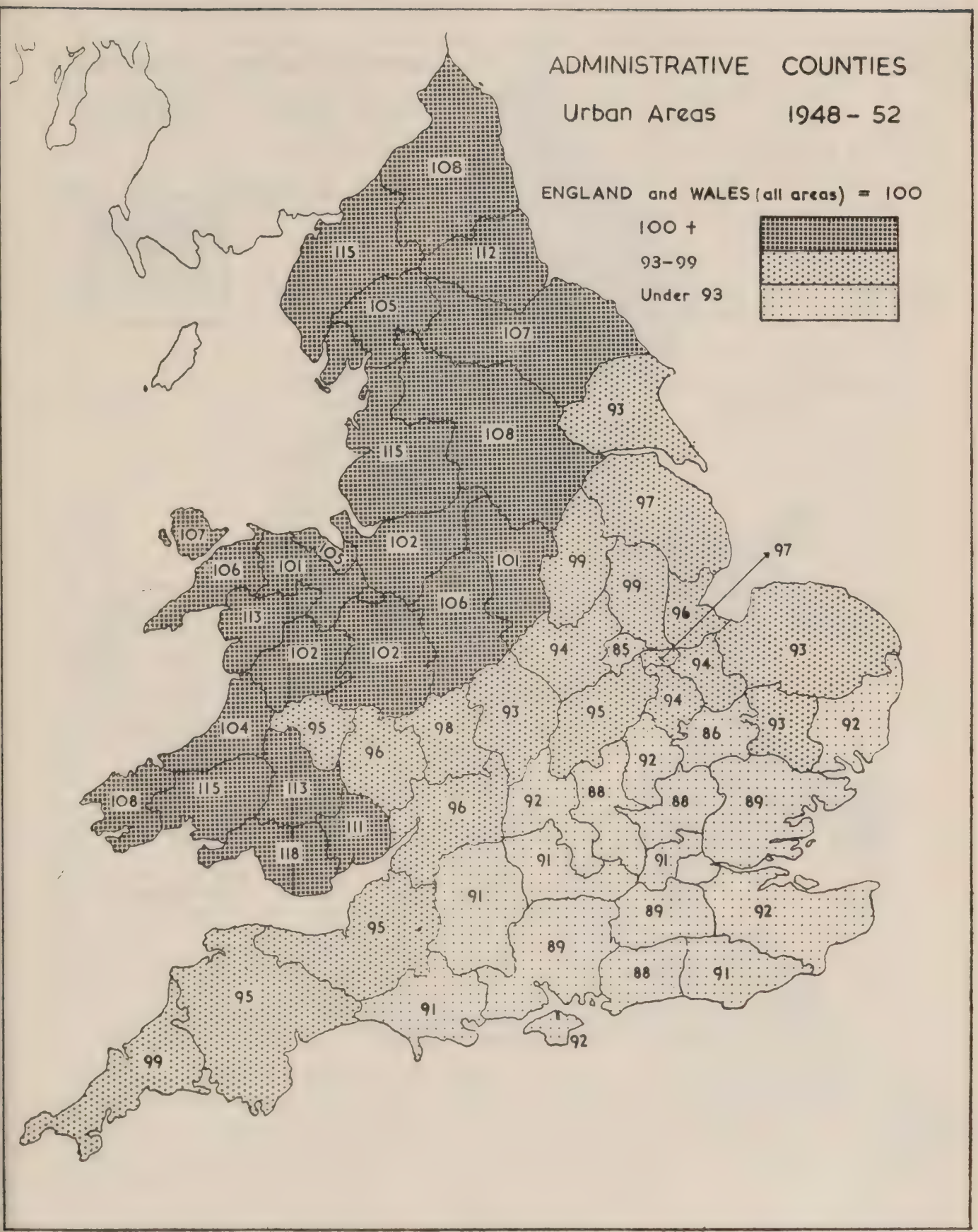
Further details of death rates by regions and density aggregates in 1952 are given in Table XLVI (page 77).

Diagram 3



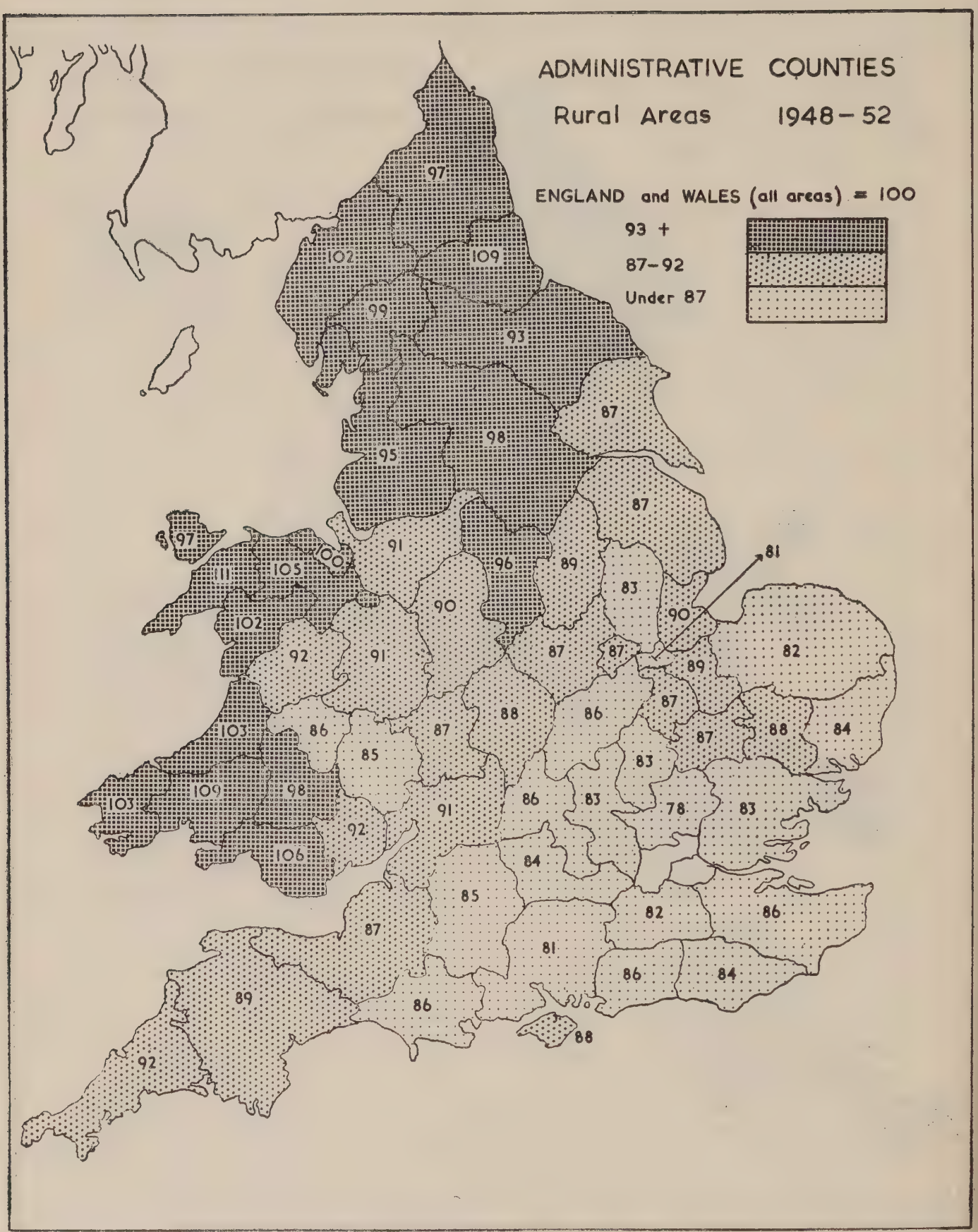
Standardized Mortality Ratios, 1948-52 (Standard = England and Wales).

Diagram 4



Standardized Mortality Ratios, 1948-52 (Standard = England and Wales).

Diagram 5



Standardized Mortality Ratios, 1948-52 (Standard = England and Wales).

Causes of Death at Different Ages

Table XLVII (page 78) shows numbers of deaths in 1952 from selected causes at different ages, the death rates being given in Table XLVIII (page 82).

The principal causes of the 18,555 deaths at ages *under one year* are discussed in the next section (Infant Mortality).

At ages 1-4, there were 3,356 deaths in 1952, of which 273 were due to motor vehicle accidents and 426 to other accidents. A further 467 deaths were assigned to pneumonia, 282 to congenital malformations, and 159 to leukæmia.

At ages 5-14, there were 2,911 deaths, of which 409 were caused by motor vehicle and 433 by other accidents, about three times as many fatal accidents occurring among boys as among girls. Pneumonia was the reported cause of 117 deaths, appendicitis of 96 deaths, congenital malformations of 150 deaths, and leukæmia of 176 deaths.

Table XXXIX.—Crude annual death rates per 1,000 living and comparative mortality indices, 1841–1950 and 1941 to 1952

Period	Crude death rate per 1,000 living		Comparative Mortality Index* (1938 base)	
	M	F	M	F
1841–50 ...	23·1	21·6	2·12	2·44
1851–60 ...	23·1	21·4	2·09	2·37
1861–70 ...	23·7	21·4	2·14	2·37
1871–80 ...	22·7	20·1	2·09	2·27
1881–90 ...	20·3	18·1	1·93	2·10
1891–1900 ...	19·3	17·1	1·87	2·01
1901–10 ...	16·4	14·4	1·60	1·69
1911–20 ...	15·1	13·0	1·45	1·49
1921–30 ...	12·9	11·4	1·16	1·22
1931–40 ...	13·0	11·5	1·07	1·10
1941–50 ...	14·1	11·0	0·92	0·89
1941	14·0	11·8	1·10	1·04
1942	12·5	10·5	0·97	0·92
1943	12·7	11·1	0·98	0·94
1944	12·6	10·7	0·95	0·89
1945	12·3	10·7	0·92	0·88
1946	12·2	10·9	0·89	0·88
1947	12·9	11·2	0·92	0·89
1948	11·5	10·1	0·82	0·79
1949	12·3	11·1	0·86	0·85
1950	12·3	11·0	0·85	0·83
1951	13·4	11·8	0·92	0·88
1952	12·2	10·5	0·84	0·78

* Based upon civilian mortality only during the periods 1914–18 and 1939–49.

At ages 15-24, there were 4,858 deaths of which 729 were caused by motor vehicle accidents (638 male, 91 female) and 759 by other accidents (667 male, 92 female). Respiratory tuberculosis accounted for 517 deaths (188 male, 329 female). 113 deaths were ascribed to leukæmia and 352 to other malignant neoplasms.

At ages 25-44, where there were 23,912 deaths, 2,854 were due to respiratory tuberculosis, 5,315 to maligant neoplasms, 1,072 to vascular lesions affecting the central nervous system, 1,679 to chronic rheumatic heart disease, and 1,252 to arteriosclerotic (including coronary) heart disease, the last comprising 1,087 deaths of men and 165 deaths of women. Motor vehicle accidents caused 990 deaths and other accidents 1,452 deaths.

At ages 45-64, 115,049 deaths were registered, 68,914 of men and 46,135 of women, a ratio of 1·5 to 1. Deaths from respiratory tuberculosis amongst men (3,184) were much in excess of those amongst women (797). Other causes of death that contributed importantly to the over-all sex disparity were arteriosclerotic (including coronary) heart disease (13,812 men, 4,182 women), pneumonia (2,027 men, 1,166 women), bronchitis (5,377 men, 1,249 women), and cancer of lung (6,876 men, 992 women).

At ages 65-74, 134,772 deaths were registered, with the ratio of men to women at 1·18 to 1. The principal causes certified included cancer (14,513 men, 12,269 women), vascular lesions of the central nervous system (9,904 men, 12,202 women), arteriosclerotic (including coronary) and degenerative heart disease (21,768 men, 16,676 women), and bronchitis (6,048 men, 2,627 women).

At ages 75 and over there were 194,071 deaths of which 85,005 were of men and 109,066 were of women. The principal causes were broadly similar to those at ages 65-74. Despite the over-all excess of female deaths, causes which continued to show a male preponderence were respiratory tuberculosis, cancer of lung, arteriosclerotic (including coronary) heart disease, bronchitis, ulcer of stomach and duodenum, and suicide.

Table XL.—Abridged Life Table, 1950-52. England and Wales

Age x	Males		Females	
	1_x	$\mathring{e}_x$	1_x	$\mathring{e}_x$
0	10,000	66·47	10,000	71·48
1	9,674	67·70	9,749	72·32
2	9,651	66·86	9,728	71·47
3	9,637	65·96	9,717	70·55
4	9,627	65·03	9,708	69·62
5	9,619	64·08	9,702	68·66
10	9,587	59·28	9,680	63·81
15	9,561	54·44	9,661	58·93
20	9,517	49·68	9,630	54·11
25	9,452	45·00	9,586	49·35
30	9,383	40·32	9,530	44·63
35	9,303	35·64	9,463	39·92
40	9,198	31·02	9,376	35·27
45	9.042	26·51	9,254	30·70
50	8,768	22·26	9,065	26·29
55	8,311	18·35	8,783	22·05
60	7,604	14·82	8,366	18·03
65	6,583	11·73	7,736	14·29
70	5,256	9·06	6,779	10·96
75	3,713	6·79	5,409	8·10
80	2,126	4·99	3,631	5·84
85	880	3·53	1,815	4·19

This abridged life table is constructed from the estimated home population in 1950, 1951 and 1952, the total deaths registered in those years including those of non-civilians registered in England and Wales.

The column headed 1_x shows the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the death probabilities indicated by the 1950-1952 death records. Column $\mathring{e}_x$ is the "expectation of life", that is the average future lifetime which would be lived by persons aged exactly x, if likewise subject to these death probabilities.

Table XLI.—Expectation of Life at Birth and at Age 1 Year, 1838-1932 and 1943 to 1952, England & Wales

From English Life Table	Year	Expectation of life at			
		Birth		Age 1 year	
		Male	Female	Male	Female
No. 1	1841	40	42	47	48
2	1838–44	40	42	47	47
3	1838–54	40	42	47	47
4	1871–80	41	45	48	50
5	1881–90	44	47	51	53
6	1891–1900	44	48	52	55
7	1901–10	49	52	56	58
8	1910–12	52	55	58	60
9	1920–22	56	60	60	63
10	1930–32	59	63	62	65
From annual Abridged Life Tables	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72
	1950	67	71	68	72
	1951	66	71	67	72
	1952	67	72	68	73
	1950–52	66	71	68	72

Table XLII.—Annual death rates per 1,000 living, by quarters in each year 1931 to 1952, with ratios to each yearly rate taken as 100

Year	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	September	December	March	June	September	December
1931	16·5	11·5	9·6	11·7	*134*	*93*	*78*	*95*
1932	15·4	11·6	9·7	11·5	*128*	*97*	*81*	*96*
1933	17·1	10·8	9·4	12·0	*139*	*88*	*76*	*98*
1934	14·6	11·8	9·6	11·2	*124*	*100*	*81*	*95*
1935	13·2	12·0	9·8	12·0	*113*	*103*	*84*	*103*
1936	15·1	11·8	9·7	12·0	*125*	*98*	*80*	*99*
1937	16·2	11·6	9·7	12·3	*131*	*94*	*78*	*99*
1938	13·6	11·6	9·9	11·5	*117*	*100*	*85*	*99*
1939	15·1	11·7	9·9	11·8	*125*	*97*	*82*	*98*
1940	20·6	11·9	10·8	14·1	*143*	*83*	*75*	*98*
1941	18·4	14·2	10·1	11·5	*136*	*105*	*75*	*85*
1942	15·8	12·0	9·8	11·6	*128*	*98*	*80*	*94*
1943	14·5	11·7	10·1	15·7	*112*	*90*	*78*	*121*
1944	15·3	12·0	11·0	12·7	*120*	*94*	*87*	*100*
1945	16·5	11·5	10·0	12·6	*131*	*91*	*79*	*100*
1946	15·4	11·2	9·7	11·9	*128*	*93*	*81*	*99*
1947	17·6	11·3	9·2	11·4	*143*	*92*	*75*	*93*
1948	12·4	10·3	9·4	11·7	*113*	*94*	*85*	*106*
1949	15·2	11·2	9·3	11·8	*129*	*95*	*79*	*100*
1950	14·0	11·1	9·3	12·3	*120*	*95*	*80*	*106*
1951	19·1	11·1	9·1	11·0	*153*	*89*	*73*	*88*
1952	13·4	10·6	8·9	12·4	*119*	*94*	*79*	*110*

Table XLIII.—Average annual death rates per 1,000 living by sex and age, 1841 to 1952

	Males								Females							
	All ages	0–	5–	15–	25–	45–	65–	85 and over	All ages	0–	5–	15–	25–	45–	65–	85 and over
1841–1850...	23·1	71·3	7·24	8·23	11·2	23·6	89·6	312·3	21·6	61·2	7·27	8·50	11·6	21·1	82·4	293·2
1851–1860...	23·1	72·7	6·79	7·71	10·9	23·2	86·8	308·3	21·4	63·0	6·84	7·98	10·9	20·1	80·0	289·0
1861–1870...	23·7	73·5	6·43	7·26	11·5	24·8	87·7	315·0	21·4	63·7	6·25	7·30	10·7	20·6	79·8	285·0
1871–1880...	22·7	68·4	5·29	6·24	11·3	26·1	90·2	327·4	20·1	58·3	5·05	6·12	9·92	21·0	80·9	296·4
1881–1890...	20·3	61·6	4·20	4·97	9·79	25·5	89·4	306·0	18·1	51·9	4·23	4·97	8·76	20·6	78·9	271·0
1891–1900...	19·3	62·7	3·40	4·38	8·82	25·2	89·4	286·7	17·1	52·8	3·49	4·06	7·58	20·3	79·5	261·3
1901–1905...	17·1	54·7	2·93	3·77	7·59	23·0	83·4	274·6	15·0	45·8	3·03	3·34	6·34	18·1	72·5	249·4
1906–1910...	15·6	45·4	2·67	3·45	6·76	21·7	82·0	283·0	13·8	38·0	2·78	3·05	5·60	16·9	70·8	250·9
1911–1915...	15·5	40·9	2·75	3·69	6·76	21·0	81·7	281·6	13·3	34·0	2·75	3·00	5·17	16·0	69·5	245·4
1916–1920...	14·9	34·4	3·11	4·85	7·61	19·5	81·1	267·8	12·8	28·4	3·18	4·06	5·91	14·4	65·9	241·9
1921–1925...	12·9	27·0	2·10	3·06	5·24	16·9	76·2	272·7	11·4	21·8	2·05	2·83	4·26	12·8	64·0	241·2
1926–1930...	12·9	23·1	2·06	2·93	4·84	17·0	76·3	298·1	11·4	18·5	1·90	2·67	3·97	12·4	62·5	254·4
1931–1935...	12·7	20·1	1·84	2·81	4·23	16·6	75·1	278·9	11·4	16·0	1·71	2·51	3·67	11·9	61·0	245·0
1936–1940...	13·3	17·5	1·60	2·64	3·95	17·3	76·2	286·9	11·6	13·7	1·40	2·17	3·22	11·5	60·1	253·0
1941–1945...	12·8	15·5	1·44	2·99	3·72	15·7	69·0	227·0	10·9	12·3	1·13	1·98	2·84	9·86	52·6	207·0
1946–1950...	12·2	10·5	0·79	1·42	2·58	14·5	69·9	241·6	10·9	8·14	0·59	1·29	2·17	8·79	52·1	208·9
1951	13·4	7·35	0·61	1·13	2·30	15·1	80·9	307·8	11·8	5·68	0·41	0·77	1·82	8·79	57·7	249·1
1952	12·2	7·02	0·54	1·12	2·10	13·8	72·9	265·1	10·5	5·45	0·38	0·64	1·60	8·04	50·2	212·3

Table XLIV.—Deaths from certain causes, by age, occurring in each quarter of the year 1952. England and Wales

Cause of Death, and Int. Classn. No.	Age	Quarterly Aggregate				Total for Year	Percentage distribution by Quarters			
		Mar.	June	Sept.	Dec.		Mar.	June	Sept.	Dec.
Respiratory tuberculosis (001-008)	0–	32	26	24	16	98	*33*	*27*	*24*	*16*
	15–	1205	831	560	775	3371	*35*	*25*	*17*	*23*
	45–	1281	942	656	1102	3981	*32*	*24*	*16*	*28*
	65 and over	555	458	353	519	1885	*29*	*24*	*19*	*28*
	All ages	3073	2257	1593	2412	9335	*33*	*24*	*17*	*26*
Cancer of lung (162, 163)	0–	—	—	—	2	2	—	—	—	*100*
	15–	238	184	174	236	832	*29*	*22*	*21*	*28*
	45–	1936	1846	1939	2147	7868	*25*	*23*	*25*	*27*
	65 and over	1300	1353	1358	1506	5517	*24*	*24*	*25*	*27*
	All ages	3474	3383	3471	3891	14219	*24*	*24*	*24*	*28*
Asthma (241)	0–	9	7	14	6	36	*25*	*19*	*39*	*17*
	15–	71	74	97	90	332	*22*	*22*	*29*	*27*
	45–	368	228	200	306	1102	*33*	*21*	*18*	*28*
	65 and over	409	220	182	362	1173	*35*	*19*	*15*	*31*
	All ages	857	529	493	764	2643	*32*	*20*	*19*	*29*
Diabetes mellitus (260)	0–	10	3	6	10	29	*34*	*11*	*21*	*34*
	15–	49	39	45	46	179	*27*	*22*	*25*	*26*
	45–	209	203	150	189	751	*28*	*27*	*20*	*25*
	65 and over	686	571	472	651	2380	*29*	*24*	*20*	*27*
	All ages	954	816	673	896	3339	*29*	*24*	*20*	*27*
Vascular lesions affecting C.N.S. (330-334)	0–	23	15	14	11	63	*37*	*24*	*22*	*17*
	15–	338	251	283	294	1166	*29*	*22*	*24*	*25*
	45–	3565	3100	2701	3380	12746	*28*	*24*	*21*	*27*
	65 and over	16105	13457	11007	14838	55407	*29*	*24*	*20*	*27*
	All ages	20031	16823	14005	18523	69382	*29*	*24*	*20*	*27*
Chronic rheumatic heart disease (410-416)	0–	11	14	10	14	49	*22*	*29*	*20*	*29*
	15–	539	455	401	481	1876	*29*	*24*	*21*	*26*
	45–	1040	811	720	976	3547	*29*	*23*	*20*	*28*
	65 and over	1136	798	659	1040	3633	*31*	*22*	*18*	*29*
	All ages	2726	2078	1790	2511	9105	*30*	*23*	*20*	*27*
Arteriosclerotic and degenerative heart disease (420)	0–	4	—	—	—	4	*100*	—	—	—
	15–	329	311	268	355	1263	*26*	*25*	*21*	*28*
	45–	5009	4226	3796	4962	17993	*28*	*23*	*21*	*28*
	65 and over	12124	9503	8324	12219	42170	*29*	*22*	*20*	*29*
	All ages	17466	14040	12388	17536	61430	*28*	*23*	*20*	*29*
Pneumonia, including pneumonia of newborn (490-493, 763)	0–	1373	691	518	1010	3592	*39*	*19*	*14*	*28*
	15–	241	173	103	185	702	*34*	*25*	*15*	*26*
	45–	1136	668	399	990	3193	*36*	*21*	*12*	*31*
	65 and over	4365	2329	1507	3832	12033	*36*	*19*	*13*	*32*
	All ages	7115	3861	2527	6017	19520	*36*	*20*	*13*	*31*
Bronchitis (500-502)	0–	201	84	49	208	542	*37*	*16*	*9*	*38*
	15–	156	69	46	153	424	*37*	*16*	*11*	*36*
	45–	2531	1028	590	2477	6626	*38*	*16*	*9*	*37*
	65 and over	7546	3356	1817	6958	19677	*38*	*17*	*9*	*36*
	All ages	10434	4537	2502	9796	27269	*38*	*17*	*9*	*36*
Ulcer of stomach (540)	0–	1	1	1	1	4	*25*	*25*	*25*	*25*
	15–	50	37	41	28	156	*32*	*24*	*26*	*18*
	45–	262	225	233	272	992	*26*	*23*	*23*	*28*
	65 and over	507	356	353	503	1719	*29*	*21*	*21*	*29*
	All ages	820	619	628	804	2871	*28*	*22*	*22*	*28*
Ulcer of duodenum (541)	0–	2	—	1	—	3	*67*	—	*33*	—
	15–	72	53	61	63	249	*29*	*21*	*25*	*25*
	45–	286	222	206	282	996	*29*	*22*	*21*	*28*
	65 and over	359	260	253	393	1265	*28*	*21*	*20*	*31*
	All ages	719	535	521	738	2513	*29*	*21*	*21*	*29*
Motor Vehicle traffic accidents (E810-E825)	0–	149	192	184	137	662	*22*	*29*	*28*	*21*
	15–	323	399	496	428	1646	*20*	*24*	*30*	*26*
	45–	178	155	186	253	772	*23*	*20*	*24*	*33*
	65 and over	232	158	200	300	890	*26*	*18*	*22*	*34*
	All ages	882	904	1066	1118	3970	*22*	*23*	*27*	*28*
Accidental Falls (E900-E904)	0–	21	38	34	24	117	*18*	*32*	*29*	*21*
	15–	72	70	83	73	298	*24*	*24*	*28*	*24*
	45–	106	108	101	133	448	*24*	*24*	*22*	*30*
	65 and over	952	728	653	882	3215	*30*	*23*	*20*	*27*
	All ages	1151	944	871	1112	4078	*29*	*23*	*21*	*27*
Suicide and self-inflicted injury (E970-E979)	0–	—	—	—	3	3	—	—	—	*100*
	15–	288	297	267	270	1122	*26*	*26*	*24*	*24*
	45–	517	558	470	465	2010	*26*	*28*	*23*	*23*
	65 and over	296	324	288	295	1203	*25*	*27*	*24*	*24*
	All ages	1101	1179	1025	1033	4338	*25*	*27*	*24*	*24*

Table XLV.—Standardized Mortality Ratios in Administrative Counties with associated County Boroughs, and in Aggregates of Urban and Rural Areas within Administrative Counties. England and Wales, 1948-52.

(*England and Wales*, = 100).

Administrative Counties, with associated County Boroughs		Aggregates of Urban Areas within Admin. Counties		Aggregates of Rural Areas within Admin. Counties	
County	S.M.R.	County	S.M.R.	County	S.M.R.
Lancashire	117	Glamorganshire	118	Caernarvonshire	111
Durham	114	Carmarthenshire	115	Carmarthenshire	109
Glamorganshire	113	Cumberland	115	Durham	109
Carmarthenshire	112	Lancashire	115	Glamorganshire	106
Cumberland	110	Brecknockshire	113	Denbighshire	105
Northumberland	110	Merionethshire	113	Cardiganshire	103
Yorkshire, West Riding	110	Durham	112	Pembrokeshire	103
Caernarvonshire	109	Monmouthshire	111	Merionethshire	102
Monmouthshire	108	Pembrokeshire	108	Cumberland	102
Staffordshire	107	Northumberland	108	Flintshire	100
Merionethshire	106	Yorkshire, West Riding	108	Westmorland	99
Pembrokeshire	105	Anglesey	107	Brecknockshire	98
Yorkshire, North Riding	105	Yorkshire, North Riding	107	Yorkshire, West Riding	98
Cardiganshire	103	Caernarvonshire	106	Anglesey	97
Cheshire	103	Staffordshire	106	Northumberland	97
Denbighshire	103	Flintshire	105	Derbyshire	96
Flintshire	103	Westmorland	105	Lancashire	95
Yorkshire, East Riding	103	Cardiganshire	104	Yorkshire, North Riding	93
Anglesey	102	Cheshire	102		
Brecknockshire	102	Montgomeryshire	102		
London	102	Shropshire	102	Cornwall	92
Westmorland	102	Denbighshire	101	Montgomeryshire	92
		Derbyshire	101	Monmouthshire	92
				Cheshire	91
Derbyshire	100			Gloucestershire	91
Nottinghamshire	99	Cornwall	99	Shropshire	91
Warwickshire	99	Lincolnshire, Kesteven	99	Lincolnshire, Holland	90
Montgomeryshire	97	Nottinghamshire	99	Staffordshire	90
Worcestershire	97	Worcestershire	98	Devon	89
Cornwall	96	Lincolnshire, Lindsey	97	Ely, Isle of	89
Devon	96	Peterborough, Soke of	97	Nottinghamshire	89
Shropshire	96	Gloucestershire	96	Suffolk, West	88
Leicestershire	95	Herefordshire	96	Warwickshire	88
Lincolnshire, Lindsey	95	Lincolnshire, Holland	96	Wight, Isle of	88
Peterborough, Soke of	95	Devon	95	Cambridgeshire	87
Gloucestershire	94	Northamptonshire	95	Huntingdonshire	87
Lincolnshire, Holland	93	Radnorshire	95	Leicestershire	87
Ely, Isle of	92	Somerset	95	Lincolnshire, Lindsey	87
Northamptonshire	92	Ely, Isle of	94	Rutland	87
Somerset	92	Huntingdonshire	94	Somerset	87
Sussex, East	92	Leicestershire	94	Worcestershire	87
		Norfolk	93	Yorkshire, East Riding	87
		Suffolk, West	93		
Kent	91	Warwickshire	93		
Middlesex	91	Yorkshire, East Riding	93	Dorset	86
Southampton	91			Kent	86
Wight, Isle of	91			Northamptonshire	86
Bedfordshire	90	Bedfordshire	92	Oxfordshire	86
Essex	90	Kent	92	Radnorshire	86
Herefordshire	90	Oxfordshire	92	Sussex, West	86
Huntingdonshire	90	Suffolk, East	92	Herefordshire	85
Suffolk, West	90	Wight, Isle of	92	Wiltshire	85
Dorset	89	Berkshire	91	Berkshire	84
Lincolnshire, Kesteven	89	Dorset	91	Suffolk, East	84
Radnorshire	89	Middlesex	91	Sussex, East	84
Suffolk, East	89	Sussex, East	91	Bedfordshire	83
Berkshire	88	Wiltshire	91	Buckinghamshire	83
Wiltshire	88	Essex	89	Essex	83
Norfolk	87	Southampton	89	Lincolnshire, Kesteven	83
Oxfordshire	87	Surrey	89	Norfolk	82
Surrey	87	Buckinghamshire	88	Surrey	82
Sussex, West	87	Hertfordshire	88	Peterborough, Soke of	81
Cambridgeshire	86	Sussex, West	88	Southampton	81
Rutland	86	Cambridgeshire	86	Hertfordshire	78
Buckinghamshire	85	Rutland	85		
Hertfordshire	85				

Table XLVI.—All Causes: Death rates per 1,000 living by sex and age in Standard Regions and population density aggregates, 1952.

	Males						Females					
	0–	5–	15–	45–	65 & over	All ages	0–	5–	15–	45–	65 & over	All ages
ENGLAND AND WALES ..	7·02	0·54	1·81	13·8	79·2	12·2	5·45	0·38	1·31	8·04	58·4	10·5
Conurbations	6·85	0·53	1·85	14·9	84·0	12·4	5·38	0·38	1·33	8·17	60·3	10·3
Areas outside conurbations:												
Urban areas with populations 100,000 and over	7·08	0·55	1·86	14·3	83·0	12·5	5·44	0·43	1·38	8·39	59·8	10·6
Urban areas with populations of 50,000 and under 100,000	7·13	0·58	1·72	13·9	79·9	12·5	6·11	0·42	1·27	7·88	57·8	10·9
Urban areas with populations under 50,000	7·31	0·54	1·82	13·4	78·8	12·7	5·48	0·37	1·33	8·14	58·8	11·0
Rural areas	6·94	0·54	1·74	11·1	70·6	11·0	5·28	0·37	1·21	7·53	55·5	10·1
NORTH OF ENGLAND												
Regions:												
Northern	8·47	0·55	2·10	14·9	79·8	12·5	6·50	0·45	1·52	8·80	61·5	10·3
East and West Ridings ..	7·42	0·50	1·88	14·3	84·7	12·9	6·01	0·44	1·39	8·63	62·4	10·9
North Western	8·17	0·58	2·04	15·9	85·0	13·4	6·63	0·41	1·49	8·96	62·9	11·3
Total	8·02	0·55	2·01	15·2	83·7	13·0	6·41	0·43	1·47	8·83	62·5	11·0
Conurbations:												
Tyneside	9·16	0·35	2·33	16·0	81·9	13·1	6·57	0·39	1·64	8·85	60·6	10·1
West Yorkshire	7·33	0·47	1·96	15·3	89·4	14·2	6·08	0·48	1·32	8·93	64·9	12·1
S.E. Lancashire	7·89	0·62	2·06	16·7	87·6	13·7	6·63	0·43	1·51	9·43	64·2	11·6
Merseyside	9·55	0·53	2·21	16·5	84·8	12·5	7·08	0·38	1·61	8·37	61·8	10·1
Total	8·32	0·52	2·10	16·2	86·8	13·5	6·59	0·42	1·50	9·01	63·5	11·2
Areas outside conurbations:												
Urban areas with populations of 100,000 and over ..	7·24	0·61	1·97	15·5	81·4	13·0	6·25	0·50	1·47	8·61	64·5	10·8
Urban areas with populations of 50,000 and under 100,000	7·04	0·72	1·88	16·0	83·5	13·2	6·70	0·49	1·45	9·22	64·4	11·1
Urban areas with populations under 50,000	7·32	0·55	1·93	15·2	85·7	13·1	5·41	0·42	1·39	8·75	64·2	10·8
Rural areas	7·66	0·55	1·76	13·0	73·0	11·1	5·61	0·46	1·33	8·24	59·1	10·0
MIDLANDS AND EASTERN												
Regions:												
North Midland	7·06	0·53	1·73	12·2	75·4	11·4	5·63	0·39	1·30	7·69	57·3	9·79
Midland	7·39	0·59	1·82	13·5	79·6	11·2	5·81	0·39	1·32	8·04	58·7	9·43
Eastern	5·87	0·46	1·61	11·0	73·0	11·3	4·59	0·32	1·17	7·06	55·3	10·3
Total	6·86	0·54	1·74	12·4	76·2	11·3	5·41	0·37	1·27	7·64	57·2	9·78
Conurbation:												
West Midlands	7·23	0·59	1·84	14·7	82·8	11·3	6·05	0·35	1·37	8·06	59·1	9·20
Areas outside conurbation:												
Urban areas with populations of 100,000 and over ..	6·10	0·54	1·75	14·1	81·2	11·8	4·96	0·51	1·33	8·44	58·9	10·1
Urban areas with populations of 50,000 and under 100,000	6·73	0·58	1·64	13·1	83·1	11·3	5·72	0·39	1·27	7·82	55·2	9·64
Urban areas with populations under 50,000	6·72	0·61	1·64	12·3	84·8	12·1	5·13	0·36	1·20	7·72	62·1	10·4
Rural areas	6·52	0·47	1·76	10·4	70·7	10·7	4·87	0·35	1·17	7·06	57·3	9·76
GREATER LONDON	5·52	0·51	1·67	14·1	82·1	11·9	4·18	0·35	1·20	7·55	58·2	9·96
SOUTH OF ENGLAND												
Regions:												
Remainder of South East ..	6·30	0·51	1·62	12·4	74·9	12·9	4·63	0·38	1·17	7·48	55·1	11·8
Southern	6·14	0·48	1·54	11·6	74·1	11·1	4·69	0·30	1·07	7·28	54·1	10·3
South Western	6·63	0·60	1·70	12·6	75·4	12·2	4·89	0·39	1·25	7·94	57·4	11·5
Total	6·36	0·53	1·62	12·2	74·8	12·1	4·75	0·36	1·16	7·59	55·6	11·2
Urban areas with populations of 100,000 and over ..	6·41	0·56	1·69	13·5	81·2	12·6	4·54	0·32	1·20	8·14	61·9	11·4
Urban areas with populations of 50,000 and under 100,000	5·44	0·51	1·61	14·2	77·7	13·3	4·98	0·43	1·00	7·53	58·2	12·1
Urban areas with populations under 50,000	6·15	0·55	1·64	12·7	78·7	12·9	4·57	0·38	1·27	7·64	57·0	11·7
Rural areas	6·25	0·64	1·64	11·0	70·7	11·3	4·56	0·37	1·08	7·50	54·4	10·4
WALES												
Regions:												
Wales I and II	8·79	0·60	2·21	14·9	80·4	13·4	6·38	0·37	1·50	8·81	60·9	10·6
Urban areas with populations of 100,000 and over ..	7·30	0·57	2·24	16·6	84·8	13·4	6·52	0·36	1·54	8·54	60·1	9·87
Urban areas with populations of 50,000 and under 100,000	14·0	0·20	2·08	17·6	138·0	15·7	8·33	0·25	2·08	8·25	50·8	10·1
Urban areas with populations under 50,000	8·43	0·60	2·18	15·3	84·3	13·6	6·36	0·37	1·49	9·18	62·8	11·1
Rural areas	8·52	0·73	2·10	13·2	75·4	12·7	5·36	0·44	1·36	7·93	63·6	10·5

Table XLVII. — Causes of Death by Sex, at Different Periods of Life. England and Wales, 1952. (Classified in accordance with the International Abbreviated List, with certain sub-divisions).

Abbreviated List No.	Causes of Death		All ages	0–4 weeks	4 wks. –1 yr.	Years 1–	5–	15–	25–	45–	65–	75 and over
	ALL CAUSES	M	**257760**	**7136**	**3527**	**1930**	**1734**	**3039**	**13415**	**68914**	**73060**	**85005**
		F	**239724**	**5195**	**2697**	**1426**	**1177**	**1819**	**10497**	**46135**	**61712**	**109066**
B1	Tuberculosis of respiratory system	M	**6421**	1	8	18	23	188	1561	3184	1161	277
		F	**2914**	—	7	24	17	329	1293	797	286	161
B2	Tuberculosis, other forms	M	**693**	—	28	127	59	74	150	166	64	25
		F	**557**	—	24	90	69	70	107	108	55	34
B3	Syphilis and its sequelae	M	**1097**	1	12	—	2	2	54	479	387	160
		F	**522**	3	5	1	—	2	32	229	135	115
B4	Typhoid fever	M	**5**	—	—	—	—	—	2	2	1	—
		F	**4**	—	—	—	—	—	1	—	2	1
B5	Cholera	M	—	—	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—	—	—
B6	Dysentery, all forms	M	**24**	—	1	1	2	2	6	3	2	7
		F	**12**	—	3	2	—	—	1	—	1	5
B7	Scarlet fever and streptococcal sore throat	M	**30**	1	—	3	3	4	8	5	4	2
		F	**34**	—	1	3	3	3	5	11	5	3
B8	Diphtheria	M	**14**	—	—	7	4	—	1	2	—	—
		F	**18**	—	—	2	4	5	4	2	1	—
B9	Whooping cough	M	**84**	—	56	24	2	1	—	1	—	—
		F	**100**	—	55	40	3	—	1	1	—	—
B10	Meningococcal infections	M	**160**	1	64	60	10	5	8	11	—	1
		F	**130**	3	47	40	10	4	4	13	5	4
B11	Plague	M	—	—	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—	—	—
B12	Acute poliomyelitis	M	**167**	—	5	20	34	26	75	7	—	—
		F	**108**	4	3	6	21	23	45	6	—	—
B13	Smallpox	M	—	—	—	—	—	—	—	—	—	—
		F	**1**	—	—	—	—	—	—	1	—	—
B14	Measles	M	**71**	1	15	38	12	1	4	—	—	—
		F	**70**	—	21	29	17	1	-	2	—	—

B15	Typhus and other rickettsial diseases	M	—	—	—	—	—	—	—	—	—	—
		F	**1**	—	—	—	—	—	—	1	—	—
B16	Malaria	M	**8**	—	—	—	—	2	2	4	—	—
		F	**1**	—	—	—	—	—	1	—	—	—
B17	All other diseases classified as infective and parasitic	M	**529**	11	32	34	45	24	97	152	68	66
		F	**551**	2	28	35	25	32	94	163	78	94
B18	Malignant neoplasm of stomach (151)	M	**8066**	—	—	—	—	9	300	3118	2766	1873
		F	**6343**	—	—	1	—	2	206	1663	2212	2259
	Malignant neoplasm of trachea, bronchus and lung (162, 163)	M	**11981**	1	—	1	—	13	659	6876	3462	969
		F	**2237**	—	—	—	—	4	156	992	657	428
	Malignant neoplasm of breast (170)	M	**59**	—	—	—	—	—	2	23	19	15
		F	**8285**	—	—	—	—	4	817	3659	2127	1678
	Malignant neoplasm of uterus (171–174)	F	**4024**	—	—	3	—	7	376	1917	1043	678
	Leukaemia and aleukaemia (204)	M	**1102**	1	11	95	104	64	159	327	229	112
		F	**941**	—	8	64	72	49	126	299	193	130
	Other malig. & lymphatic neoplasms (Rem. 140–205)	M	**24221**	1	22	101	121	191	1287	7168	8037	7293
		F	**20383**	6	10	84	102	122	1227	6757	6037	6038
B19	Benign and unspecified neoplasms	M	**791**	2	11	13	34	26	123	357	141	84
		F	**925**	6	13	7	24	31	153	390	161	140
B20	Diabetes mellitus	M	**1091**	—	—	4	16	15	61	258	383	354
		F	**2247**	—	—	2	7	21	81	493	868	775
B21	Anaemias	M	**603**	—	3	6	10	6	22	112	202	242
		F	**1148**	—	2	5	8	10	45	232	334	512
B22	Vascular lesions affecting central nervous system	M	**29158**	4	10	6	21	55	530	5732	9904	12896
		F	**40230**	—	6	2	17	41	542	7014	12202	20406
B23	Nonmeningococcal meningitis	M	**197**	13	49	25	12	4	24	44	21	5
		F	**145**	13	41	21	5	7	11	27	14	6
B24	Rheumatic fever	M	**144**	—	—	6	45	21	29	25	13	5
		F	**184**	—	2	2	53	27	40	36	14	10
B25	Chronic rheumatic heart disease	M	**3469**	—	—	—	26	88	683	1410	748	514
		F	**5637**	—	1	—	22	109	996	2138	1254	1117
B26	Arteriosclerotic heart disease including coronary disease (420)	M	**38997**	1	—	—	—	9	1087	13812	13854	10234
		F	**22432**	—	—	—	3	2	165	4182	8595	9485
	Degenerative heart disease (421, 422)	M	**30812**	—	—	1	2	17	156	2786	7914	19936
		F	**40986**	—	1	1	4	8	126	2241	8081	30524

Note :— the table includes the following deaths from epidemic diseases which occurred more than a year after onset of the disease :
B4. Typhoid fever, 1M (65—). 3F(65—, 65—, 75+.)
B7. Scarlet fever, 5M (15—, 25—, 25—, 45—, 65—.) 10F(5—, 15—, 15—, 25—, 45—, 45—, 65—, 65—, 75+, 75+.)
B8. Diphtheria, 1M (45—.) 8F (15—, 15—, 15—, 25—, 25—, 25—, 45—, 65—.)
B9. Whooping cough, 2M (15—, 45—.) 1F (45—.)
B13. Smallpox, 1F (45—.)
B15. Typhus and other rickettsial diseases, 1F(45—.)

Table XLVII—*continued.*

Abbreviated List No.	Causes of Death		All ages	0–4 weeks	4 wks.–1 yr.	Years 1–	5–	15–	25–	45–	65–	75 and over
B27	Other diseases of heart	M	3170	3	4	6	5	29	133	829	1021	1240
		F	3273	1	4	9	7	22	111	679	1123	1717
B28	Hypertension with heart disease	M	5081	—	—	—	1	2	52	1168	1783	2075
		F	5913	—	—	—	—	1	48	967	1981	2916
B29	Hypertension without mention of heart	M	3925	—	3	—	2	5	139	1023	1249	1504
		F	4057	—	—	—	1	9	107	714	1220	2006
B46 (Pt.)	Other circulatory diseases (450–468)	M	6858	—	4	1	4	13	116	885	1854	3981
		F	7512	—	2	3	4	20	106	772	1669	4936
B30	Influenza	M	879	1	20	5	12	15	55	273	240	258
		F	871	1	15	9	7	11	45	155	209	419
B31	Pneumonia	M	9782	—	1197	260	58	59	325	2027	2451	3405
		F	8826	—	899	207	59	49	269	1166	1873	4304
B32	Bronchitis	M	17694	17	205	72	27	7	260	5377	6048	5681
		F	9574	12	141	52	16	24	133	1249	2627	5320
B46 (Pt.)	Other diseases of respiratory system (470–475, 510–527)	M	3175	13	38	46	32	48	245	1302	841	610
		F	1401	10	30	27	32	26	141	297	274	564
B33	Ulcer of stomach and duodenum	M	4059	3	—	1	—	24	316	1645	1271	799
		F	1325	—	3	—	—	5	60	343	424	490
B34	Appendicitis	M	598	1	3	42	60	40	88	156	117	91
		F	447	1	—	18	36	20	38	126	119	89
B35	Intestinal obstruction and hernia	M	1588	68	63	30	14	15	81	381	436	500
		F	1556	46	35	17	5	7	60	340	480	566
B36	Gastritis, enteritis, and diarrhoea except diarrhoea of newborn	M	1065	3	362	65	8	18	96	156	166	191
		F	1333	3	267	40	14	21	121	224	275	368
B37	Cirrhosis of liver	M	645	1	3	1	6	5	87	297	158	87
		F	479	2	5	3	5	7	40	203	151	63
B38	Nephritis and nephrosis	M	2994	—	10	21	55	128	441	977	641	721
		F	2879	1	8	18	46	92	350	825	713	826
B39	Hyperplasia of prostate	M	4351	—	—	—	—	—	2	301	1379	2669
B40*	Complications of pregnancy, childbirth and puerperium	F	498	—	—	—	—	81	398	17	1	1

B41	Congenital malformations	M	**2323**	1006	591	141	72	87	162	186	48	30
		F	**2130**	942	527	141	78	57	133	168	54	30
B42	Birth injuries, postnatal asphyxia and atelectasis	M	**2656**	2592	64	—	—	—	—	—	—	—
		F	**1667**	1631	34	2	—	—	—	—	—	—
B43	Diarrhoea of newborn (764)	M	**40**	40	—	—	—	—	—	—	—	—
		F	**26**	26	—	—	—	—	—	—	—	—
	Other infections of newborn (763, 765-768)	M	**575**	569	6	—	—	—	—	—	—	—
		F	**404**	403	1	—	—	—	—	—	—	—
B44	Other dis. of early infancy and immaturity unqualified	M	**2695**	2601	91	3	—	—	—	—	—	—
		F	**2018**	1948	66	4	—	—	—	—	—	—
B45	Senility without mention of psychosis, ill-defined and unknown causes	M	**2997**	10	16	7	1	6	9	30	233	2685
		F	**4748**	5	7	6	1	5	7	26	224	4467
B46 (Rem).	All other diseases (Remainder 001–795)	M	**8524**	70	223	187	165	247	907	2596	2240	1889
		F	**10407**	44	155	143	140	216	1003	2986	2781	2939
BE47	Motor vehicle accidents	M	**3147**	—	3	190	289	638	869	606	302	25
		F	**970**	—	2	83	120	91	121	202	180	170
BE48	All other accidents	M	**5850**	94	290	253	323	667	1260	1321	633	1001
		F	**4195**	77	212	173	110	92	192	513	655	21791
BE49	Suicide and self-inflicted injury	M	**2788**	—	—	—	2	121	633	1241	535	256
		F	**1550**	—	—	—	1	33	335	769	314	98
BE50	Homicide and operations of war	M	**207**	5	4	9	11	18	49	73	34	4
		F	**95**	5	6	7	9	17	24	20	5	2
BN47	Fractures, head injuries and internal injuries	M	**6468**	6	13	230	372	1009	1679	1456	722	981
		F	**3438**	6	12	110	136	131	176	394	596	1877
BN48	Burns	M	**245**	—	6	42	13	12	36	33	29	74
		F	**492**	2	11	75	54	10	26	70	79	165
BN49	Effects of poisons	M	**2042**	—	5	39	17	83	485	851	368	194
		F	**1624**	—	6	24	11	30	309	720	311	213
BN50	All other injuries	M	**3237**	93	273	141	223	340	611	901	385	270
		F	**1256**	74	191	54	39	62	161	320	168	187
	*Heading B40 includes the following deaths with interval between maternal condition and death stated to exceed 1 year.		**35**	—	—	—	—	4	20	9	1	1

Table XLVIII.—Death Rates by Sex from Certain Causes at Different Periods of Life. England and Wales, 1952.

(Classified in accordance with the International Abbreviated List, with certain sub-divisions).

Abbreviated List Nos.	Causes of Death		All ages	0-4 weeks	4 weeks to 1 year	1–	5–	15–	25–	45–	65–	75 and over
			Rates per million living	Rates per 1,000 related live births		Rates per million living						
	Estimated mid-year population (in thousands)	M	21,110	*345,878**		1,459	3,216	2,719	6,386	4,998	1,377	620
		F	22,845	*327,857**		1,391	3,085	2,838	6,549	5,737	1,910	1,015
	ALL CAUSES	M	**12,210**	**20·65**	**10·24**	**1,323**	**539**	**1,118**	**2,101**	**13,788**	**53,057**	**137,105**
		F	**10,493**	**15·86**	**8·26**	**1,025**	**382**	**641**	**1,603**	**8,042**	**32,310**	**107,454**
B1	Tuberculosis of respiratory system	M	304	0·00	0·02	12	7	69	244	637	843	447
		F	128	—	0·02	17	6	116	197	139	150	159
B2	Tuberculosis, other forms	M	33	—	0·08	87	18	27	23	33	46	40
		F	24	—	0·07	65	22	25	16	19	29	33
B3	Syphilis and its sequelae	M	52	0·00	0·04	—	1	1	8	96	281	258
		F	23	0·01	0·02	1	—	1	5	40	71	113
B4	Typhoid fever	M	0	—	—	—	—	—	0	0	1	—
		F	0	—	—	—	—	—	0	—	1	1
B5	Cholera	M	—	—	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—	—	—
B6	Dysentery, all forms	M	1	—	0·00	1	1	1	1	1	1	11
		F	1	—	0·01	1	—	—	0	—	1	5
B7	Scarlet fever and streptococcal sore throat	M	1	0·00	—	2	1	1	1	1	3	3
		F	1	—	0·00	2	1	1	1	2	3	3
B8	Diphtheria	M	1	—	—	5	1	—	0	0	—	—
		F	1	—	—	1	1	2	1	0	1	—
B9	Whooping cough	M	4	—	0·16	16	1	0	—	0	—	—
		F	4	—	0·17	29	1	—	0	0	—	—
B10	Meningococcal infections	M	8	0·00	0·19	41	3	2	1	2	—	2
		F	6	0·01	0·14	29	3	1	1	2	3	4
B11	Plague	M	—	—	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—	—	—

* Live birth occurrences.

B12	Acute polomyeliitis	M	8	—	0·02	14	11	10	12	1	—	—
		F	5	0·01	0·01	4	7	8	7	1	—	—
B13	Smallpox	M	—	—	—	—	—	—	—	—	—	—
		F	0	—	—	—	—	—	—	0	—	—
B14	Measles	M	3	0·00	0·04	26	4	0	1	—	—	—
		F	3	—	0·06	21	6	0	—	0	—	—
B15	Typhus and other rickettsial diseases	M	—	—	—	—	—	—	—	—	—	—
		F	0	—	—	—	—	—	—	0	—	—
B16	Malaria	M	0	—	—	—	—	1	0	1	—	—
		F	0	—	—	—	—	—	0	—	—	—
B17	All other diseases classified as infective and parasitic	M	25	0·03	0·09	23	14	9	15	30	49	106
		F	24	0·01	0·10	25	8	11	14	28	41	93
B18	Malignant neoplasm of stomach (151)	M	382	—	—	—	—	3	47	624	2,009	3,021
		F	278	—	—	1	—	1	31	290	1,158	2,226
	Malignant neoplasm of trachea, bronchus and lung (162, 163)	M	568	0·00	—	1	—	5	103	1,376	2,514	1.563
		F	98	—	—	—	—	1	24	173	344	422
	Malignant neoplasm of breast (170)	M	3	—	—	—	—	—	0	5	14	24
		F	363	—	—	—	—	1	125	638	1,114	1,653
	Malignant neoplasm of uterus (171-174)	F	176	—	—	2	—	2	57	334	546	668
	Leukaemia and aleukaemia (204)	M	52	0·00	0·03	65	32	24	25	65	166	181
		F	41	—	0·03	46	23	17	19	52	101	128
	Other malignant and lymphatic neoplasms (Remainder of 140-205)	M	1147	0·00	0·06	69	38	70	202	1,434	5,837	11,763
		F	892	0·02	0·04	60	33	43	187	1,178	3,161	5,949
B19	Benign and unspecified neoplasms	M	37	0·01	0·04	9	11	10	19	71	102	135
		F	40	0·02	0·04	5	8	11	23	68	84	138
B20	Diabetes mellitus	M	52	—	—	3	5	6	10	52	278	571
		F	98	—	—	1	2	7	12	86	454	764
B21	Anaemias	M	29	—	0·01	4	3	2	3	22	147	390
		F	50	—	0·00	4	3	4	7	40	175	504
B22	Vascular lesions affecting central nervous system	M	1381	0·01	0·02	4	7	20	83	1,147	7,192	20,800
		F	1761	—	0·02	1	6	14	83	1,223	6,388	20,104
B23	Nonmeningococcal meningitis	M	9	0·04	0·14	17	4	1	4	9	15	8
		F	6	0·04	0·12	15	2	2	2	5	7	6
B24	Rheumatic fever	M	7	—	—	4	14	8	5	5	9	8
		F	8	—	0·01	1	17	10	6	6	7	10
B25	Chronic rheumatic heart disease	M	164	—	—	—	8	32	107	282	543	829
		F	247	—	0·00	—	7	38	152	373	657	1,100

Table XLVIII—*continued.*

Abbreviated List Nos.	Causes of Death		All ages	0-4 weeks	4 weeks to 1 year	1–	5–	15–	25–	45–	65–	75 and over
			Rates per million living	Rates per 1,000 related live births		Rates per million living						
B26	Arteriosclerotic heart diseases, including coronary disease (420)	M	1,847	0·00	—	—	—	3	170	2,764	10,061	16,506
		F	982	—	—	—	1	1	25	729	4,500	9,345
	Degenerative heart disease (421, 422)	M	1460	—	—	1	1	6	24	557	5,747	32,155
		F	1794	—	0·00	1	1	3	19	391	4,231	30,073
B27	Other diseases of heart	M	155	0·01	0·01	4	2	11	21	166	741	2,000
		F	161	0·00	0·02	6	2	8	17	118	588	1,692
B28	Hypertension with heart disease	M	241	—	—	—	0	1	8	234	1,295	3,347
		F	259	—	—	—	—	0	7	169	1,037	2,873
B29	Hypertension without mention of heart	M	186	—	0·01	—	1	2	22	205	907	2,426
		F	178	—	—	—	0	3	16	124	639	1,976
B46 (pt)	Other circulatory diseases (450-468)	M	325	—	0·01	1	1	5	18	177	1,346	6,421
		F	329	—	0·00	2	1	7	16	135	874	4,863
B30	Influenza	M	42	0·00	0·06	3	4	6	9	55	174	416
		F	38	0·00	0·04	6	2	4	7	27	109	413
B31	Pneumonia	M	463	—	3·46	178	18	22	51	406	1,780	5,492
		F	386	—	2·75	149	19	17	41	203	981	4,240
B32	Bronchitis	M	838	0·05	0·60	49	8	3	41	1,076	4,392	9,163
		F	419	0·04	0·43	37	5	8	20	218	1,375	5,241
B46 (pt)	Other diseases of respiratory system (470-475, 510-527)	M	150	0·04	0·11	32	10	18	38	261	611	984
		F	61	0·03	0·09	19	10	9	22	52	143	556
B33	Ulcer of stomach and duodenum	M	192	0·01	—	1	—	9	49	329	923	1,289
		F	58	—	0·00	—	—	2	9	60	222	483
B34	Appendicitis	M	28	0·00	0·01	29	19	15	14	31	85	147
		F	20	0·00	—	13	12	7	6	22	62	88
B35	Intestinal obstruction and hernia	M	75	0·20	0·18	21	4	6	13	76	317	806
		F	68	0·14	0·11	12	2	2	9	59	251	558

B36	Gastritis, enteritis and diarrhoea except diarrhoea of newborn	M	50	0·01	1·04	45	2	7	15	31	121	308
		F	58	0·01	0·82	29	5	7	18	39	144	363
B37	Cirrhosis of liver	M	31	0·00	0·01	1	2	2	14	59	115	140
		F	21	0·01	0·02	2	2	2	6	35	79	62
B38	Nephritis and nephrosis	M	142	—	0·03	14	17	47	69	195	466	1,163
		F	126	0·00	0·02	13	15	32	53	144	373	814
B39	Hyperplasia of prostate	M	206	—	—	—	—	—	0	60	1,001	4,305
B40	Complications of pregnancy, childbirth and puerperium	F	22	—	—	—	—	29	61	3	1	1
B41	Congenital malformations	M	110	2·91	1·71	97	22	32	25	37	35	48
		F	93	2·88	1·61	101	25	20	20	29	28	30
B42	Birth injuries, postnatal asphyxia and atelectasis	M	126	7·50	0·19	—	—	—	—	—	—	—
		F	73	4·98	0·10	1	—	—	—	—	—	—
B43	Diarrhoea of newborn (764)	M	2	0·12	—	—	—	—	—	—	—	—
		F	1	0·08	—	—	—	—	—	—	—	—
	Other infections of newborn (763, 765-768)	M	27	1·65	0·02	—	—	—	—	—	—	—
		F	18	1·23	0·00	—	—	—	—	—	—	—
B44	Other diseases of early infancy, and immaturity unqualified	M	128	7·53	0·26	2	—	—	—	—	—	—
		F	88	5·95	0·20	3	—	—	—	—	—	—
B45	Senility without mention of psychosis, ill-defined and unknown causes	M	142	0·03	0·05	5	0	2	1	6	169	4,331
		F	208	0·02	0·02	4	0	2	1	5	117	4,401
B46 (Rem)	All other diseases (Remainder 001-795)	M	404	0·20	0·65	128	51	91	142	519	1,627	3,047
		F	456	0·13	0·48	103	45	76	153	520	1,456	2,896
BE47	Motor vehicle accidents	M	149	—	0·00	130	90	235	136	121	219	403
		F	42	—	0·00	60	39	32	18	35	94	168
BE48	All other accidents	M	277	0·27	0·85	173	100	245	197	264	460	1,627
		F	184	0·24	0·66	124	36	32	29	89	343	2,139
BE49	Suicide and self-inflicted injury	M	132	—	—	—	1	45	99	248	389	413
		F	68	—	—	—	0	12	51	134	164	97
BE50	Homicide and operations of war	M	10	0·01	0·01	6	3	7	8	15	25	6
		F	4	0·02	0·02	5	3	6	4	3	3	2
BN47	Fractures, head injuries and internal injuries	M	306	0·02	0·04	158	116	371	263	291	524	1,582
		F	150	0·02	0·04	79	44	46	27	69	312	1,849
BN48	Burns	M	12	—	0·01	29	4	4	6	7	21	119
		F	22	0·01	0·05	54	18	4	4	12	41	163
BN49	Effects of poisons	M	97	—	0·01	27	5	31	76	170	267	313
		F	71	—	0·02	17	4	11	47	126	163	210
BN50	All other injuries	M	153	0·27	0·79	97	69	125	96	180	280	435
		F	55	0·23	0·58	39	13	22	25	56	88	184

INFANT MORTALITY AND STILLBIRTH

About 1,900 babies were delivered every day throughout 1952. Out of the 1,900, there were 43 stillborn, and 50 who died before their first birthday, more than half within a few days of birth.

During the whole year, 689,371 births occurred; of these 673,735 were live and 15, 636 still. Deaths of infants under one year numbered 18,555. The losses by stillbirth and death within one year were 50 per 1,000 total births; of these 23 per 1,000 were stillborn. The infant mortality was 28 per 1,000 live births.

Although there was justifiable satisfaction in reporting for 1952 the lowest infant mortality rate ever recorded (seven per cent less than in 1951), there should be no complacency in the face of rates for stillbirths and for deaths under one week which were hardly any lower than in the previous few years.

This disquieting resistance to improvement became apparent in 1949 and has been maintained for four years; the rates from 1949 to 1952 as percentages of those in 1948 were as follows:

	Rates in 1948	Rates per cent of those in 1948:			
		1949	1950	1951	1952
Stillbirths per 1,000 total births	23·2	*98*	*97*	*99*	*98*
Deaths 0-6 days per 1,000 related live births ...	15·6	*100*	*97*	*99*	*97*
Deaths 7-27 days per 1,000 related live births ...	4·1	*90*	*80*	*80*	*76*
Deaths 4 weeks and under 1 year per 1,000 related live births ...	14·2	*92*	*78*	*77*	*65*

Definitions of the rates employed: problems of measurement

A simple definition of an infant mortality rate is the number of deaths among liveborn infants at ages under 12 months registered in a given year per 1,000 live births registered during the same year.

The number of live births and stillbirths registered during the year does not necessarily give the true population at risk. There may be variations in delay between the actual time of birth (or stillbirth) and the time when the birth (or stillbirth) is registered. In the case of live births, some of the infants dying in any year will have been born the previous year and should properly be related to live births occurring at that time ; if the birth-rate has changed, this may be different from the number occuring during the year. The Medical Text Volumes for 1940-45 (pages 27-29) and 1946-47 (pages 15-17) discuss an adjustment which takes both these factors into account. Infant mortality rates have been calculated per 1,000 "related live birth occurrences" regularly since 1941; the phrase is abbreviated in the table legends to "related live births". In the same way, stillbirths have been calculated per 1,000 total birth occurrences.

The following table shows the infant mortality rates based on "registered" and "related" live births respectively for each of the last five years, and sets out the differences between them. The difference in 1952 was negligible, there being relatively little change in the number of births taking place as compared with the previous year.

	1947	1948	1949	1950	1951	1952
(*a*) Infant mortality per 1,000 "registered" live births ...	41·6	34·4	32·7	30·1	29·8	27·6
(*b*) Infant mortality per 1,000 "related" live births ...	41·4	33·9	32·4	29·6	29·7	27·6
Difference (*b*)–(*a*)	–0·2	–0·5	–0·3	–0·5	–0·1	0·0

The 1940-45 Medical Text shows how to compute "related" infant mortality rates by sex, legitimacy and quarters of the year, and for regional areas. The method is more fully described with the aid of worked examples, in a recent comprehensive review.* The necessary data from which the infant mortality rates per 1,000 related live births during 1952 were calculated are given in Table 26 of Part I and Table YY of Part II of the Annual Review.

The rates exhibited in the present series of tables all relate to the calendar year unless otherwise specified, and conform to the following definitions:

Infant Mortality Rate—Deaths among liveborn infants at ages under 1 year per 1,000 related live births.

Neonatal Mortality Rate—Deaths among liveborn infants, under 4 weeks of age per 1,000 related live births.

(*a*) *Early Neonatal Mortality Rate*—Deaths among liveborn infants under 1 week of age per 1,000 related live births;

(*b*) *Late Neonatal Mortality Rate*—Deaths among liveborn infants aged 1 week but under 4 weeks per 1,000 related live births.

Post-neonatal Mortality Rate—Deaths among liveborn infants aged four weeks but under 1 year of age per 1,000 related live births. ("Post-neonatal" is preferred as the descriptive adjective for this age period because it is self-explanatory in relation to the well-established term "neonatal". The adjective "postnatal" is best employed in its literal meaning of "after birth", irrespective of the time period.)

Stillbirth Rate (*Late Foetal Mortality Rate*)—Births at or over 28 weeks gestation which are not liveborn, per 1,000 births (live and still).

Perinatal Mortality Rate—This term has come into use in recent years to describe a combination of stillbirths with early neonatal deaths (deaths under 1 week) per 1,000 total births; it appears in several of the tables in the present Text with total births (live plus still) as the denominator. Stillbirths combined with all neonatal deaths are also shown.

Causes of death at different age-periods

More than one-half of the deaths under 1 year of age now take place in the first week of life, and two-thirds before the 28th day. Eighty per cent of the first week deaths are due to conditions which for the most part originate before or during birth (Table L, page 94, prenatal and natal causes), 12 per cent being

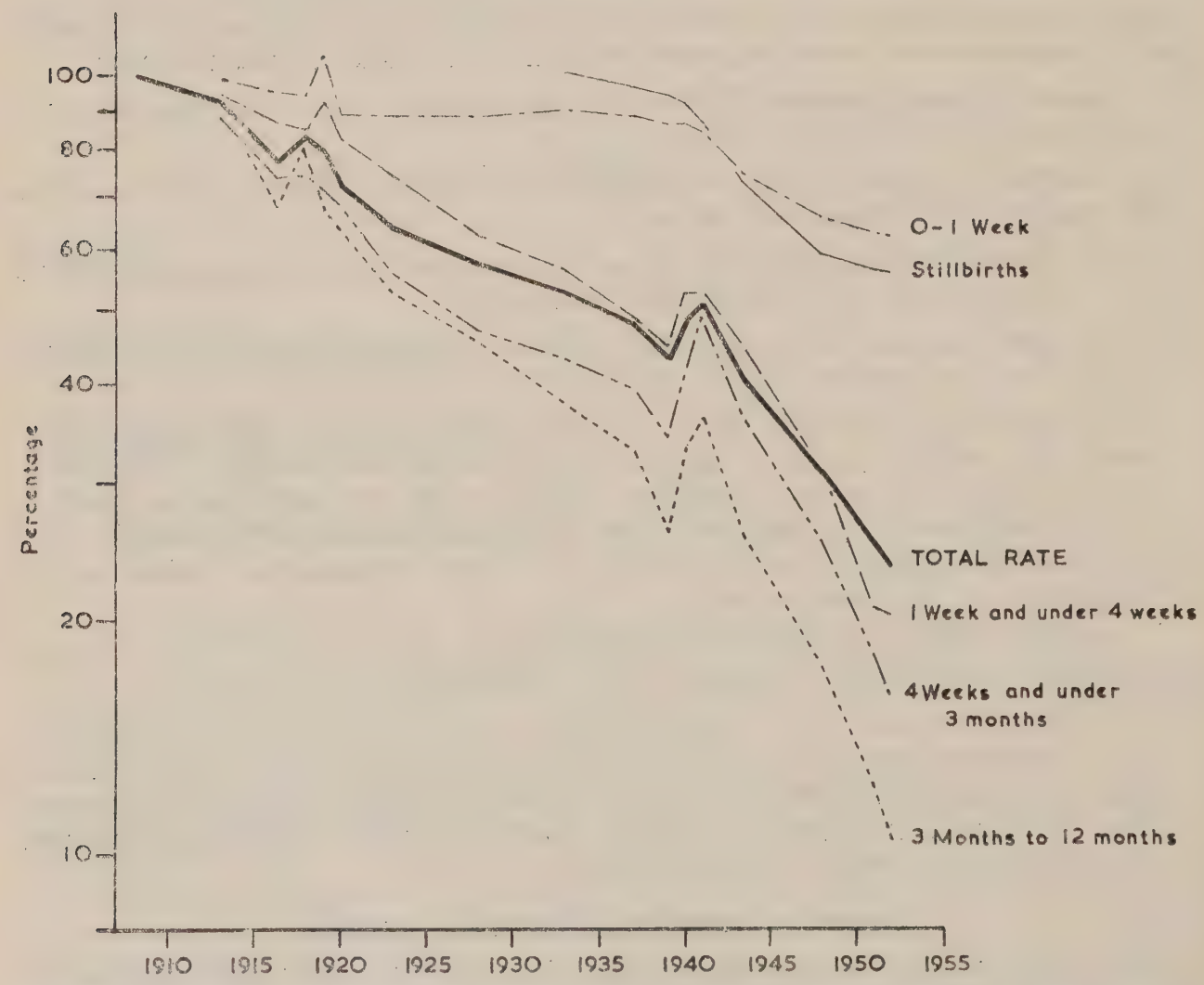
* Logan, W.P.D." The measurement of infant mortality". Population Bulletin of the United Nations, No. 3, October, 1953, p. 30

due to congenital malformations. The causes of stillbirth are not registered in England and Wales, but it is generally accepted that in many cases the factors responsible for late foetal deaths are very similar to those responsible for deaths in the first few days of life. For example, at least 57 per cent of the registered mortality in the first week among liveborn infants in England and Wales during 1952 was due to, or associated with, immaturity (Table LI, page 96). In the same year 47 per cent of the notified stillbirths weighed $5\frac{1}{2}$ lb. or under, and were therefore immature by the weight criterion.*

The combination of first week infant deaths and stillbirths—perinatal deaths—is thus a crude measure of the loss among all births (live and still) due to environmental factors which acted on the unborn child through the mother, genetic factors, and "obstetric causes" associated with labour and delivery.

Over the main span of infancy (from 7 days to 1 year) the majority of deaths (53 per cent) are attributed to respiratory infections, enteritis, and other diseases, mainly infective, which act directly on the infant, and are usually associated with the kind of conditions to which the infant is exposed in the postnatal environment (Table L, postnatal causes). Infant deaths at one week and over are relatively more sensitive than perinatal deaths to short term fluc-

Diagram 6



Trends in infant mortality, 1906-10 to 1952 ; Total rate (thick line) and rates at different ages (thin lines) per cent of those experienced in 1906-10. Stillbirth trend per cent of rate in 1928-30

* (Report of the Ministry of Health Part II 1952, p.136., Form LHS 27 (1952) Consolidated) Total notified stillbirths in England and Wales: 15,093. Notified premature stillbirths in England and Wales: 7,027.

tuations in the state of the public health, such as epidemics of communicable disease, and to social conditions which favour the spread of respiratory infections.

Diagram 6 shows the infant mortality rate since 1906, and below it the differential trend of the more important age-components as percentages of the 1906 rates. Stillbirths are shown as percentages of the average rates in 1928-30. The similarity between the trend of stillbirths and of first week deaths on the one hand, and between the trend of deaths from the 7th to the 28th day and the trends after the first month on the other, sufficiently indicate the reasons why these particular combinations have been chosen.

Perinatal deaths together with infant deaths at one week and over, measure the 'loss' among all registered births, live and still, within the first twelve months from birth. They are shown per 1,000 live and stillbirths, separately or combined, in some of the tables. Table XLIX (page 93; right hand side) shows how they varied in the different conurbations and standard regions in 1952. Table LII (page 98) compares the rates experienced by urban and rural aggregates within areal groupings of the standard regions.

A subsequent report will exhibit these rates experienced over the period 1952-53 in county boroughs and administrative counties.

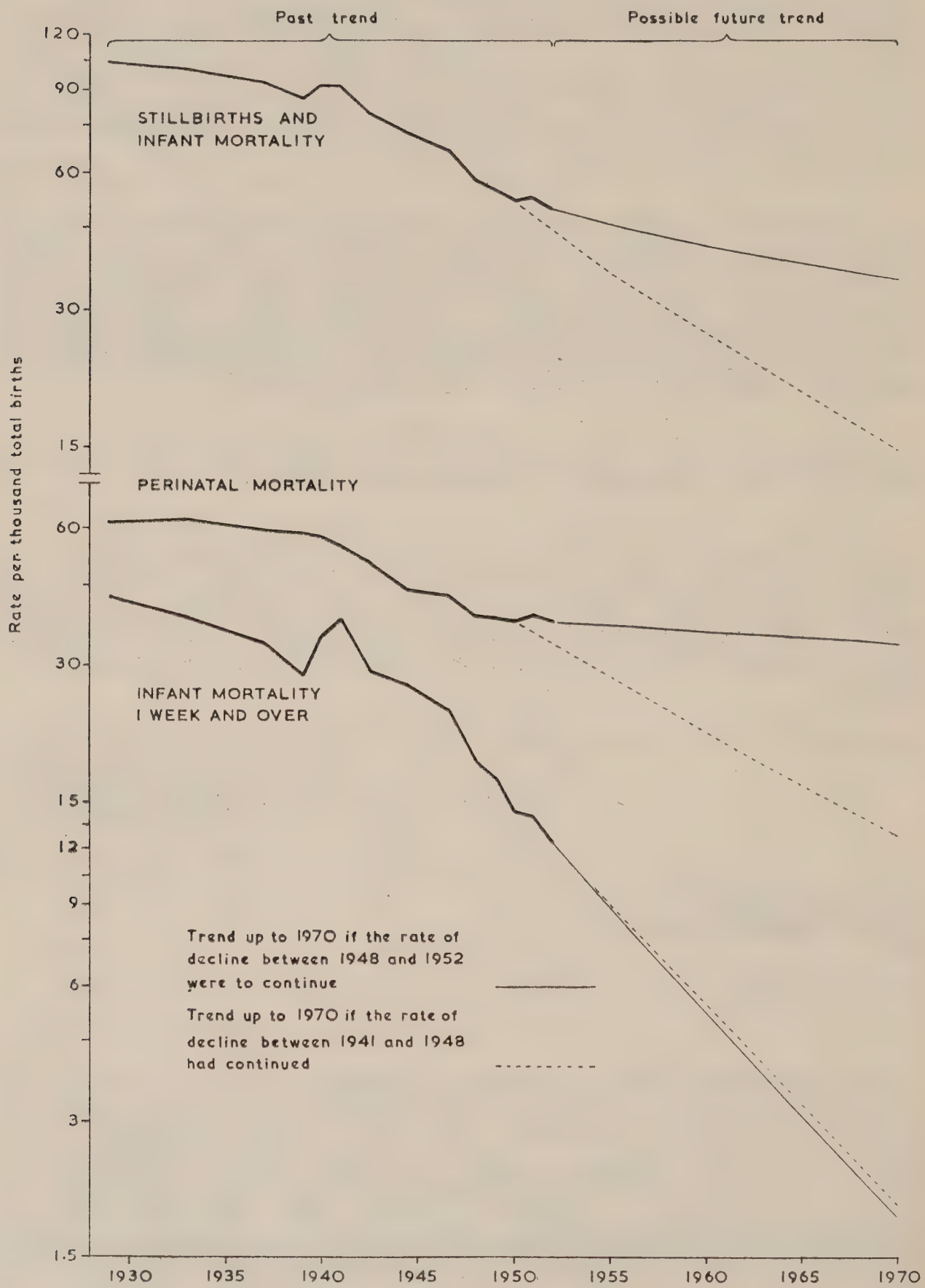
The continuous lines in Diagram 7 show the trends since 1928 of the combined loss from stillbirths and infant deaths, and of the " perinatal " and " infant " components. The percentages by which each component declined between 1948 and 1952 were 2·6 and 34·2 respectively. If this rate of change were to continue without alteration, the rates in 1960 and 1970 might be as follows:

	Actual rate in 1948	Actual rate in 1952	Possible rates in 1960 and 1970 if fall between 1948 and 1952 continues at same rate	
			1960	1970
(*a*) Perinatal mortality	38·5	37·5	35·6	33·3
(*b*) Infant deaths at 1 week and over.	18·4	12·1	5·2	1·8
(*c*) Total (*a*) + (*b*)	56·9	49·6	40·8	35·1

The hypothetical trends are shown in Diagram 7 as dotted lines. As the years go by, the pace at which the total loss declines will be governed more and more by the perinatal component. In contrast to these projections of the 1948-52 experience Diagram 7 shows in broken lines the trends which would result if the rates of change between 1941 and 1948 had continued to prevail. The decline in perinatal mortality from 1941-48 was relatively substantial and the difference between the two projected trends of perinatal mortality is evident at a glance. The trends for mortality among infants of 1 week or over, on the other hand, run close to one another, as the rate of fall over the period 1948-52 was not very different from that over the period 1941-48.

Table LIII (page 100) shows the secular trends of infant mortality at various ages, of stillbirth, and of the loss from both combined.

Diagram 7



Late foetal and infant deaths per thousand total births, 1928-30 to 1952, and possible trends up to 1970

Infant Mortality by Cause

Cause analyses of infant mortality are shown for England and Wales by quarters of the year in Table LV (page 102), by sex and age in Table LI and by regional areas in Table LVI (page 104).

The following table indicates the extent to which some of the more important causes contributed to the reduction in infant mortality as between the two years 1949 and 1952.

Cause of Death (and International Classification numbers)	Infant mortality per 100,000 live births 1949	1952	Per cent change between 1949 and 1952
All Causes	**3269**	**2754**	—16
Total causes mainly of Prenatal and Natal origin including congenital malformations	**1897**	**1792**	—6
Immaturity etc. (774, 776)	681	535	—21
Atelectasis (762)	329	364	+11 —8
Birth injuries (760, 761)	262	277	+6
Congenital malformations (750-759) ...	432	455	+5
Erythroblastosis (770)	76	65	—14
Hæmorrhagic diseases (771)	24	27	+13
Attributed to maternal toxæmia (769) ...	24	26	+8
Ill-defined diseases of early infancy (773) ...	70	44	—37
Total causes mainly of Postnatal origin ...	**1205**	**826**	—31
Septicæmia, skin infections and sepsis of newborn (053, 690-698, 765-768) ...	16	18	+13
Meningitis other than tuberculous (057, 340)	39	34	—13
Gastro-enteritis and diarrhœa (571, 764)	266	100	—62
Pneumonia, bronchitis: acute respiratory infections (470-502, 763)	635	513	—19
Otitis media and mastoiditis; empyema; pleurisy (391-393, 518, 519)	22	12	—45
Whooping cough; measles (056, 085) ...	61	22	—64
Tuberculosis (001-019)	23	10	—57
Other causes classified as infective not specified above (rem 001-138)	22	13	—41
Asphyxia in cot or elsewhere (E921-E925)	89	75	—16
Lack of care, neglect etc. (E926, E980-E985)	22	17	—23
Other accidents (rem E800-E999)	11	11	Nil
Unclassified (rem 140-795)	**153**	**122**	—20
Neoplasms (140-239)	14	14	Nil
Immaturity or with mention of immaturity (774, 776, 760·5-773·5)	1030	964	—6
Immaturity alone or primary to diseases other than of early infancy (774, 776)	681	535	—21
Immaturity associated with diseases of early infancy (760·5-773·5)	349	429	+23
All other causes (760·0-773·0 and remainder) ...	2239	1790	—20
Atelectasis and birth injury (760-762)	591	641	+8
With mention of immaturity (·5)	230	303	+32
Without mention of immaturity (·0)	360	338	—6

The differential trend exhibited between birth injuries and atelectasis on the one hand, and immaturity alone or primary on the other arises in part, and perhaps almost entirely, from variations in certification practice (1951 Text, pages 112-113). The section of the International Classification "Certain Diseases of Early Infancy", to which was assigned 84 per cent of the deaths under 1 week and 80 per cent of the deaths under 28 days, can be cross classified according to whether immaturity was or was not mentioned on the death certificate. In 1952, 65 per cent of the neonatal deaths assigned to this section were reported in association with immaturity, or with immaturity as the only known cause. (The percentage of remaining neonatal deaths with mention of immaturity is unknown but examination of a series of consecutive certificates over 6 months indicates that it is unlikely to exceed 5-8 per cent and that it mainly comprises congenital malformations.)

Taking the two groups together, mortality from birth injuries and atelectasis *with* mention of immaturity increased by 32 per cent in 1952 as compared with 1949 while mortality *without* mention of immaturity decreased by 6 per cent over the same period. Much of the increase can be set against the decrease in the death-rate from immaturity alone (I.S.C. Nos. 774-776), which was 21 per cent.

For the "diseases of early infancy" as a whole, deaths with mention of immaturity together with deaths from immaturity alone declined by no more than 6 per cent, while deaths without mention of immaturity declined by 20 per cent.

Erythroblastosis is a condition which has attracted considerable attention in recent years. Mortality from it, which is regarded as preventable, declined by 14 per cent. This disease, however, accounts for little more than 2 per cent of all infant deaths.

The septicæmia and sepsis group, including sepsis of newborn (I.S.C. Nos. 053; 690-698; 765-768), is also responsible for relatively few deaths, but the rate remains about the same despite progress in the field of antibiotics.

There are two major postnatal cause groups—gastro-enteritis, and pneumonia and bronchitis: to the latter may be added upper respiratory infections and influenza. Gastro-enteritis has declined by 62 per cent since 1949, and this substantial reduction has contributed in large measure to the overall decline in mortality after the first week. In the case of pneumonia, bronchitis, and upper respiratory infections, the reduction is less spectacular, being only 19 per cent. Pneumonia in the first 4 weeks taken separately, however, shows an increase of 16 per cent in the 1952 rates over those for 1949: without this particular component, the cause group exhibits a decrease of 27 per cent. Pneumonia of the newborn includes all cases of aspiration pneumonia—for example, those due to fluid inhaled during delivery. It is likely that the rise in this rate reflects an increase in the number of autopsies and a greater clinical interest in the respiratory problems of the newborn.

The main conclusion from this one examination of the separate trends in mortality among postnatal causes is that gastro-enteritis set the pace at which the rate for all postnatal causes declined between the two years 1949 and 1952, so that unless mortality attributed to respiratory infections falls more quickly in the future, the overall decline may on the whole be less impressive than the difference of 30 per cent between 1949 and 1952.

Table XLIX.—Infant Mortality per 1,000 Related Live Births, and combined Stillbirth and Infant Death Rates per 1,000 Total Births, according to Age. England and Wales, Standard Regions and Conurbations, 1952

Standard Regions and Conurbations within the standard regions	Total infant mortality (under 1 year)	Infant mortality per 1,000 related live births at various ages									Stillbirths and infant deaths. Rates per 1,000 total births				
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late fœtal deaths at or over 28 weeks gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
ENGLAND AND WALES	**27·6**	**18·3**	**15·2**	**3·2**	**9·3**	**7·6**	**7·6**	**3·7**	**3·0**	**2·6**	**49·6**	**22·7**	**37·5**	**12·1**	**40·6**
Standard Regions:															
NORTH OF ENGLAND															
Northern	32·1	20·2	15·8	4·4	11·9	7·6	8·2	4·4	4·1	3·4	56·2	24·9	40·3	15·8	44·6
East and West Ridings	29·9	18·9	15·8	3·1	11·0	8·3	7·6	4·4	3·6	2·9	53·1	23·9	39·4	13·7	42·4
North Western	32·4	21·1	17·1	4·0	11·3	8·6	8·6	4·6	3·6	3·0	56·7	25·2	41·9	14·8	45·8
MIDLANDS AND EASTERN															
North Midland	28·5	18·9	15·1	3·8	9·6	7·5	7·5	3·5	3·3	2·8	50·3	22·5	37·2	13·1	41·0
Midland	28·8	18·6	15·4	3·2	10·2	8·0	7·5	4·0	3·1	3·1	50·8	22·7	37·8	13·0	40·9
Eastern	23·3	16·2	13·7	2·5	7·1	6·5	7·2	2·7	2·3	2·1	43·9	21·1	34·6	9·3	37·0
SOUTH OF ENGLAND															
London and South Eastern ..	22·6	15·7	13·4	2·3	6·9	6·8	6·6	2·8	2·1	1·9	42·1	20·0	33·1	9·0	35·3
Southern	23·4	16·3	13·6	2·7	7·1	6·7	6·9	3·0	2·2	1·9	42·9	20·0	33·3	9·6	36·0
South Western	25·6	18·8	15·9	2·9	6·8	7·6	8·2	2·2	2·3	2·3	46·0	21·0	36·5	9·5	39·4
WALES	33·3	20·8	17·1	3·7	12·5	8·1	9·0	5·7	3·5	3·3	60·3	28·0	44·6	15·7	48·1
Wales I	*33·7*	*20·6*	*17·0*	*3·6*	*13·1*	*8·3*	*8·7*	*6·1*	*3·7*	*3·4*	*61·3*	*28·6*	*45·1*	*16·2*	*48·6*
Wales II	*32·4*	*21·2*	*17·6*	*3·6*	*11·2*	*7·6*	*10·0*	*4·9*	*3·1*	*3·2*	*57·8*	*26·3*	*43·4*	*14·4*	*46·9*
Conurbations within Standard Regions:															
Tyneside conurbation	33·3	21·2	16·5	4·7	12·1	7·7	8·8	4·3	4·5	3·2	59·8	27·6	43·6	16·3	48·2
Rest of Northern region	*31·7*	*19·8*	*15·6*	*4·2*	*11·9*	*7·5*	*8·1*	*4·5*	*3·9*	*3·5*	*54·8*	*24·0*	*39·1*	*15·7*	*43·3*
West Yorkshire conurbation	29·4	18·4	16·1	2·3	11·0	9·1	7·0	4·3	3·5	3·2	53·1	24·5	40·2	12·9	42·4
Rest of East and West Riding region	*30·3*	*19·3*	*15·6*	*3·7*	*11·0*	*7·7*	*8·0*	*4·5*	*3·7*	*2·8*	*53·1*	*23·6*	*38·8*	*14·3*	*42·3*
S.E. Lancashire conurbation	32·3	20·6	17·4	3·2	11·7	9·0	8·4	5·0	3·9	2·8	57·2	25·8	42·7	14·5	45·8
Merseyside conurbation	34·5	22·3	18·0	4·3	12·2	9·2	8·8	4·9	4·0	3·3	58·5	24·9	42·4	16·1	46·7
Rest of North Western region ..	*31·0*	*20·8*	*16·3*	*4·5*	*10·2*	*7·8*	*8·5*	*4·0*	*3·1*	*3·0*	*55·0*	*24·8*	*40·7*	*14·3*	*45·1*
West Midlands conurbation	29·2	18·8	15·5	3·3	10·4	8·2	7·3	4·0	3·4	3·0	50·2	21·7	36·9	13·3	40·1
Rest of Midland region	*28·4*	*18·4*	*15·4*	*3·0*	*10·0*	*7·8*	*7·6*	*4·0*	*2·8*	*3·1*	*51·4*	*23·7*	*38·6*	*12·7*	*41·7*
Greater London conurbation	22·1	15·3	13·0	2·3	6·8	6·7	6·3	2·8	2·2	1·8	41·3	19·7	32·4	8·9	34·6
Rest of South Eastern region ..	*24·1*	*17·0*	*14·6*	*2·4*	*7·1*	*7·1*	*7·5*	*2·8*	*1·9*	*2·4*	*44·8*	*21·2*	*35·5*	*9·3*	*37·8*

Table L.—Principal Causes of Death Under One Year, arranged in ætiological groups: (*a*) Age-group distribution per cent of all deaths assigned to each cause; (*b*) Cause distribution per 1,000 total deaths in each age-group. England and Wales, 1952

Ætiological Group	Cause of Death (and International Classification numbers)	Number of infant deaths (under 1 year)	Age distribution per cent of total infant deaths assigned to each cause					Cause distribution per 1,000 total infant deaths in each age-group				
			Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality			Post-neonatal mortality (4 weeks and under 1 year)
				(Under 4 weeks)	Early (under 1 week)	Late (1 week and under 4 weeks)			Under 4 weeks	Early (under 1 week)	Late (1 week and under 4 weeks)	
ALL CAUSES	**All causes**	**18,555**	**100**	**66**	**55**	**11**	**34**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
	Congenital malformations (750–759) ..	3,066	*100*	*64*	*41*	*23*	*36*	165	159	122	331	180
	Total causes mainly of prenatal and natal origin other than congenital malformations	9,008	*100*	*97*	*91*	*7*	*3*	487	713	800	283	38
Prenatal and Natal Group (including congenital malformations)	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3,602	*100*	*98*	*91*	*7*	*2*	195	287	319	119	13
	Attributed to maternal toxæmia (769)	174	*100*	*99*	*94*	*6*	*1*	9	14	16	*5*	*0*
	Ill-defined diseases of early infancy (773)	295	*100*	*89*	*77*	*12*	*11*	16	21	22	17	5
	Postnatal asphyxia and atelectasis (762)	2,452	*100*	*98*	*92*	*5*	*2*	133	195	222	62	10
	Intracranial and spinal injury at birth (760)	1,516	*100*	*98*	*91*	*7*	*2*	82	120	136	47	5
	Other birth injury (including maternal antepartum hæmorrhage) (761) ..	353	*100*	*99*	*97*	*1*	*1*	19	28	34	*2*	*1*
	Erythroblastosis (770)	435	*100*	*95*	*85*	*10*	*5*	23	34	36	20	3
	Hæmorrhagic disease of newborn (771)	181	*100*	*97*	*84*	*13*	*3*	10	14	15	11	*1*

Postnatal Group	Total causes mainly of postnatal origin	5,567	100	24	11	13	76	299	105	59	341	681
	Gastro-enteritis (including diarrhœa of newborn) (571, 764)	676	100	10	0	9	90	36	5	0	30	98
	Pneumonia and bronchitis (490-493, 763: 500-502)	3,384	100	28	13	15	72	183	75	42	240	393
	Causes classified as infective (001-138): others mainly infective in origin*	809	100	17	5	12	83	44	11	4	47	107
	Whooping cough; measles (056, 085)	148	100	1	—	1	99	8	0	—	0	24
	Acute upper respiratory infections and influenza (470-475; 480-483)	70	100	9	—	9	91	4	0	—	3	10
	Otitis media and mastoiditis; empyema; pleurisy (391-393; 518, 519)	83	100	16	2	13	84	4	1	0	5	11
	Septicæmia; skin and subcutaneous tissue infections; sepsis of newborn (053, 690-698, 765-768)	120	100	58	17	41	42	6	6	2	23	8
	Tuberculosis other than tuberculous meningitis (001-008: 011-019)	30	100	3	3	—	97	2	0	0	—	5
	Tuberculous meningitis (010)	38	100	—	—	—	100	2	—	—	—	6
	Meningococcal infections and non-meningococcal meningitis (057; 340)	231	100	13	4	9	87	12	2	1	10	32
	Causes classified as infective not specified above (remainder 001-138)	89	100	21	7	15	79	5	2	1	6	11
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	506	100	13	4	9	87	27	5	2	22	71
	Lack of care; neglect (including foundlings); infanticide (E926; E980-E985)	116	100	88	86	2	12	6	8	10	1	2
	Other accidental causes (remainder E800-E999)	76	100	18	14	4	82	4	1	1	1	10
	Total causes remaining	914	100	31	21	11	69	49	23	19	45	101
Unclassified	Neoplasms (140-239)	92	100	18	7	12	82	5	1	1	5	12
	Other remaining causes	822	100	33	22	10	67	44	22	18	40	89

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table LI.—Principal Causes of Death Under One Year and in the Neonatal, Post-neonatal and other Age Periods, by Sex, per 1,000 related live births. England and Wales, 1952

Ætiological Group	Cause of death (and International Classification numbers)		Total Infant mortality (under 1 year)	Infant Mortality per 1,000 related live births at various ages								
				Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period		
								Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year
ALL CAUSES	**All Causes**	**M.**	**30·89**	**20·65**	**17·23**	**3·42**	**10·24**	**8·30**	**8·93**	**4·18**	**3·30**	**2·76**
		F.	**24·12**	**15·86**	**12·96**	**2·90**	**8·26**	**6·78**	**6·18**	**3·17**	**2·60**	**2·49**
Prenatal and Natal Group (including congenital malformations)	Congenital malformations (750-759) ..	M.	4·62	2·91	1·88	1·03	1·71	0·69	1·19	0·91	0·43	0·37
		F.	4·49	2·88	1·81	1·07	1·61	0·79	1·02	0·73	0·45	0·43
	Total causes mainly of prenatal and natal origin other than congenital malformations	M.	15·44	15·02	14·05	0·97	0·42	7·23	6·82	0·33	*0·05*	*0·04*
		F.	11·22	10·93	10·10	0·83	0·29	5·64	4·46	0·22	*0·04*	*0·03*
	Immaturity alone, or primary to diseases other than of early infancy (774,776)	M.	6·01	5·87	5·46	0·41	0·14	3·19	2·27	0·13	*0·01*	—
		F.	4·66	4·55	4·20	0·35	0·11	2·46	1·74	0·10	*0·01*	—
	Attributed to maternal toxæmia (769) ..	M.	0·26	0·26	0·25	*0·01*	—	0·11	0·13	—	—	—
		F.	0·26	0·26	0·24	*0·02*	*0·00*	0·15	0·09	*0·00*	—	—
	Ill-defined diseases of early infancy (773)	M.	0·51	0·46	0·39	0·07	*0·05*	0·19	0·20	*0·04*	*0·00*	*0·01*
		F.	0·36	0·32	0·28	*0·04*	*0·04*	0·16	0·12	*0·03*	—	*0·01*
	Postnatal asphyxia and atelectasis (762)	M.	4·25	4·15	3·94	0·21	0·10	2·05	1·90	0·07	*0·02*	*0·01*
		F.	3·00	2·92	2·74	0·18	0·08	1·52	1·22	*0·04*	*0·03*	*0·01*
	Intracranial and spinal injury at birth (760)	M.	2·85	2·77	2·60	0·17	0·08	1·10	1·50	*0·05*	*0·01*	*0·02*
		F.	1·63	1·61	1·48	0·13	*0·02*	0·68	0·80	*0·02*	—	*0·00*
	Other birth injury (including maternal antepartum hæmorrhage) (761) ..	M.	0·59	0·58	0·58	*0·00*	*0·01*	0·38	0·19	*0·01*	—	—
		F.	0·45	0·45	0·44	*0·01*	*0·00*	0·34	0·10	*0·00*	—	—
	Erythroblastosis (770)	M.	0·69	0·65	0·58	0·07	*0·04*	0·19	0·39	*0·02*	*0·01*	*0·01*
		F.	0·60	0·58	0·53	*0·05*	*0·02*	0·28	0·24	*0·01*	*0·00*	*0·01*
	Hæmorrhagic disease of newborn (771)	M.	0·30	0·29	0·26	*0·03*	*0·01*	*0·02*	0·24	*0·01*	—	—
		F.	0·24	0·23	0·19	*0·04*	*0·01*	*0·03*	0·16	*0·01*	—	—

	Total causes mainly of postnatal origin ..	M.	9·25	2·23	0·98	1·25	7·02	0·24	0·74	2·61	2·50	1·91
		F.	7·29	1·71	0·80	0·91	5·58	0·23	0·57	2·02	1·87	1·69
Postnatal Group	Gastro-enteritis (including diarrhœa of newborn) (571, 764)	M.	1·15	0·12	*0·01*	0·11	1·03	*0·00*	*0·00*	0·38	0·36	0·29
		F.	0·87	0·08	*0·00*	0·08	0·79	—	*0·00*	0·30	0·27	0·22
	Pneumonia and bronchitis (490-493, 763: 500-502)	M.	5·66	1·59	0·73	0·86	4·07	*0·05*	0·68	1·57	1·46	1·04
		F.	4·37	1·19	0·55	0·64	3·18	0·06	0·48	1·25	1·04	0·89
	Causes classified as infective (001-138): others mainly infective in origin* ..	M.	1·30	0·23	*0·05*	0·18	1·07	*0 01*	*0·04*	0·33	0 31	0·43
		F.	1·11	0·19	0·07	0·12	0·92	*0·01*	*0·06*	0·21	0·26	0·45
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	M.	0·88	0·11	*0·03*	0·08	0·77	*0·01*	*0·02*	0·32	0·34	0·11
		F.	0·63	0·08	*0·02*	0·06	0·55	*0·01*	*0·01*	0·24	0·25	0·06
	Lack of care; neglect (including foundlings); infanticide (E926, E980-E985)	M.	0·17	0·16	0·16	*0·00*	*0·01*	0·16	—	*0·00*	*0·01*	*0·00*
		F.	0·18	0·14	0·14	*0·00*	*0·04*	0·13	*0·01*	*0·01*	*0·01*	*0·02*
	Other accidental causes (remainder E800-E999)	M.	0·10	*0·02*	*0·01*	*0·01*	0·08	*0·01*	—	*0·01*	*0·03*	*0·04*
		F.	0·12	*0·02*	*0·02*	—	0·10	*0·02*	*0·01*	*0·02*	*0·03*	*0·05*
UNCLASSIFIED	Total causes remaining	M.	1·58	0·50	0·32	0·18	1·08	0·14	0·17	0·33	0·33	0·42
		F.	1·12	0·35	0·25	0·10	0·77	0·12	0·13	0·20	0·25	0·32
Immaturity, or with mention of immaturity (774, 776; 760·5-773·5)			9·65	9·48	8·63	0·85	0·17	4·61	4·02	0·16	*0·01*	—
Immaturity alone, or primary to disease other than of early infancy (774, 776)			5·36	5·23	4·85	0·38	0·13	2·84	2·01	0·12	*0·01*	—
Immaturity associated with diseases of early infancy (760·5-773·5)			4·29	4·25	3·78	0·47	0·04	1·78	2·00	0·04	*0·00*	—
All other causes (760·0-773·0 and remainder)			17·92	8·84	6·52	2·32	9·08	2·95	3·57	3·53	2·95	2·62

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table LII.—Infant Mortality per 1,000 Related Live Births, and combined Stillbirth and Infant Death Rates per 1,000 Total Births, according to Age. England and Wales, and Population Density Aggregates within Regional Groups, 1952

Regional groups and Population Density Aggregates	Total infant mortality (under 1 year)	Infant mortality per 1,000 related live births, at various ages									Stillbirths and infant deaths. Rates per 1,000 total births				
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late fœtal deaths at or over 28 weeks gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
ENGLAND AND WALES	**27.6**	**18·3**	**15·2**	**3·2**	**9·3**	**7·6**	**7·6**	**3·7**	**3·0**	**2·6**	**49·6**	**22·7**	**37·5**	**12·1**	**40·6**
Conurbations	27·2	17·9	15·0	2·9	9·3	7·8	7·2	3·7	3·1	2·5	48·8	22·3	36·9	11·8	39·8
Other urban areas:															
with populations of 100,000 and over	28·5	18·5	15·1	3·4	10·0	7·1	8·0	4·3	3·2	2·5	50·8	23·0	37·7	13·1	41·1
with populations of 50,000 to 100,000	28·9	19·1	15·5	3·7	9·8	7·8	7·6	3·6	3·4	2·7	51·9	23·7	38·8	13·1	42·4
with populations of under 50,000 ..	28·5	18·8	15·4	3·4	9·7	7·4	8·0	3·6	3·1	3·0	50·9	23·2	38·2	12·7	41·5
Rural areas	26·4	18·2	15·1	3·1	8·2	7·5	7·6	3·3	2·4	2·5	48·0	22·2	37·0	11·0	40·0
NORTH OF ENGLAND .. .. (Northern, E. and W. Ridings, N. Western)	**31·6**	**20·3**	**16·4**	**3·8**	**11·3**	**8·2**	**8·2**	**4·5**	**3·7**	**3·1**	**55·5**	**24·8**	**40·8**	**14·8**	**44·5**
Conurbations (Tyneside, W. Yorks., S.E. Lancs., Merseyside	32·3	20·6	17·1	3·5	11·7	8·9	8·2	4·7	3·9	3·1	56·9	25·5	42·1	14·7	45·5
Other urban areas:															
with populations of 100,000 and over	31·6	19·6	15·5	4·1	12·0	6·7	8·8	5·4	3·7	2·9	53·9	23·1	38·2	15·7	42·3
with populations of 50,000 to 100,000	33·1	21·2	16·6	4·6	11·9	8·3	8·3	4·8	4·1	3·0	57·6	25·4	41·6	16·0	46·1
with populations of under 50,000 ..	30·7	19·6	15·7	4·0	11·1	7·8	7·9	3·8	3·8	3·4	54·9	25·1	40·3	14·6	44·2
Rural areas	29·6	20·1	15·9	4·2	9·5	8·0	7·9	3·9	2·7	2·9	51·6	22·8	38·3	13·3	42·4

MIDLANDS AND EASTERN .. (N. Midland, Midland, Eastern)	**27·2**	**18·0**	**14·8**	**3·2**	**9·2**	**7·4**	**7·4**	**3·5**	**2·9**	**2·7**	**48·7**	**22·2**	**36·7**	**12·0**	**39·8**
Conurbation (West Midlands) ..	29·2	18·8	15·5	3·3	10·4	8·2	7·3	4·0	3·4	3·0	50·2	21·7	36·9	13·3	40·1
Other urban areas:															
with populations of 100,000 and over	25·6	17·5	14·5	3·0	8·1	7·2	7·3	3·9	3·1	2·2	48·1	22·1	36·3	11·8	39·2
with populations of 50,000 to 100,000	28·0	18·9	15·5	3·5	9·1	7·5	8·0	3·0	3·3	2·7	50·7	23·4	38·5	12·2	41·9
with populations of under 50,000 ..	27·7	18·5	15·2	3·3	9·2	7·3	7·9	3·3	2·7	3·2	49·4	22·4	37·2	12·2	40·5
Rural areas	25·3	17·1	14·1	3·1	8·2	7·2	6·9	3·2	2·5	2·5	46·8	22·0	35·7	11·0	38·8
SOUTH OF ENGLAND .. .. (London and S.E., Southern, S. Western)	**23·3**	**16·4**	**13·9**	**2·5**	**6·9**	**7'0**	**6·9**	**2·7**	**2·2**	**2·0**	**43·0**	**20·2**	**33·8**	**9·2**	**36·2**
Conurbation (Greater London) ..	22·1	15·3	13·0	2·3	6·8	6·7	6·3	2·8	2·2	1·8	41·3	19·7	32·4	8'9	34·6
Other urban areas:															
with populations of 100,000 and over	25·0	17·4	14·1	3·3	7·6	7·1	7·1	2·8	2·7	2·1	47·0	22·7	36·5	10·6	39·7
with populations of 50,000 to 100,000	24·2	16·9	14·0	2·8	7·3	7·6	6·4	2·8	2·5	2·1	44·6	20·9	34·7	10·0	37·4
with populations of under 50,000 ..	24·9	17·6	14·9	2·7	7·3	6·8	8·0	2·7	2·2	2·4	44·4	20·0	34·6	9·8	37·3
Rural areas	23·7	17·4	15·1	2·3	6·3	7·4	7·8	2·5	1·8	2·0	43·5	20·3	35·1	8·4	37·3
WALES	**33·3**	**20·8**	**17·1**	**3·7**	**12·5**	**8·1**	**9·0**	**5·7**	**3·5**	**3·3**	**60·3**	**28·0**	**44·6**	**15·7**	**48·1**
Urban areas with populations of 100,000 and over	33·2	21·0	17·8	3·2	12·2	8·0	9·8	6·3	3·0	2·9	58·6	26·3	43·5	15·0	46·7
Urban areas with populations of 50,000 to 100,000	46·3	22·1	18·9	3·2	24·2	9·5	9·5	8·4	9·5	6·3	89·2	45·1	63·1	26·1	66·1
Urban areas with populations of under 50,000	32·9	20·1	16·6	3·6	12·8	8·2	8·4	5·9	3·8	3·1	59·6	27·7	43·8	15·8	47·3
Rural areas	33·1	21·4	17·3	4·1	11·7	8·0	9·3	4·9	3·0	3·8	60·6	28·6	45·3	15·3	49·3

Table LIII.—Secular Trend of Stillbirths per 1,000 total births, 1928-1952, and of Deaths in the Neonatal, Post-neonatal and other Age Periods under One Year per 1,000 live births, 1906-1952. England and Wales

Quinquennium and year	Total infant mortality (under 1 year)	Infant mortality per 1,000 live births,* at various ages									Stillbirths and infant deaths—Rates per 1,000 total births†				
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (*late foetal deaths, at or over 28 weeks gestation*)	Stillbirths plus infant deaths under 1 week—"*Perinatal Mortality*"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
1906–1910	117·1	40·2	24·5	15·7	76·9	11·5	13·0	22·8	22·0	32·1	—	—	—	—	—
1911–1915	108·7	39·0	24·1	14·9	69·8	11·4	12·7	20·2	19·6	30·0	—	—	—	—	—
1916–1920	90·9	37·0	23·4	13·7	53·9	11·0	12·4	16·5	14·6	22·8	—	—	—	—	—
1921–1925	74·9	33·4	21·7	11·7	41·6	10·4	11·3	12·8	11·3	17·5	—	—	—	—	—
1926–1930	67·6	31·8	21·8	9·9	35·7	10·3	11·5	10·8	9·5	15·4	—	—	—	—	—
1931–1935	61·9	31·4	22·4	9·0	30·5	10·7	11·7	9·9	8·5	12·1	—	—	—	—	—
1936–1940	55·3	29·2	21·5	7·7	26·0	10·4	11·2	8·8	7·8	9·4	—	—	—	—	—
1941–1945	49·8	26·0	18·7	7·2	23·8	9·3	9·5	8·9	7·7	7·2	—	—	—	—	—
1946–1950	36·3	21·1	16·2	4·9	15·2	7·9	8·4	5·8	5·0	4·4	—	—	—	—	—
1929	73·9	32·8	22·2	10·5	41·1	10·4	11·9	11·5	10·6	19·0	111·4	40·0	61·4	50·0	71·6
1930	60·2	30·9	22·0	8·9	29·3	10·4	11·6	9·7	7·9	11·7	98·3	40·8	61·9	36·4	70·4
1931	65·7	31·5	22·1	9·5	34·2	10·4	11·7	10·8	9·2	14·2	104·5	40·9	62·1	42·4	71·2
1932	64·5	31·5	22·4	9·2	33·0	10·6	11·8	10·8	9·0	13·2	103·7	41·3	62·8	40·8	71·6
1933	62·7	32·1	22·9	9·3	30·6	11·0	11·8	9·8	8·6	12·2	102·5	41·4	63·4	39·1	72·3
1934	59·3	31·4	22·7	8·7	27·9	10·9	11·8	8·9	7·7	11·3	96·7	40·5	62·2	34·5	70·5
1935	57·0	30·4	22·0	8·4	26·6	10·7	11·3	9·1	7·7	9·8	95·4	40·7	61·9	33·5	69·9
1936	58·7	30·2	21·9	8·2	28·5	10·7	11·3	9·3	8·3	10·9	95·9	39·7	60·8	35·2	68·7
1937	57·7	29·7	22·0	7·8	28·0	10·8	11·2	9·4	8·3	10·3	94·4	39·0	60·2	34·2	67·6
1938	52·8	28·3	21·1	7·1	24·5	10·3	10·8	8·2	7·3	9·0	88·9	38·3	58·6	30·4	65·5
1939	50·6	28·3	21·2	7·1	22·2	10·3	10·9	7·9	7·0	7·3	86·9	38'1	58·5	28·4	65·3
1940	56·8	29·6	21·3	8·3	27·2	9·8	11·5	9·3	8·2	9·7	92·5	37·2	57·7	34·7	65·7
1941	60·0	29·0	20·7	8·3	31·1	10·1	10·6	11·3	9·7	10·1	92·4	34·8	54·7	37·7	62·7
1942	50·6	27·2	19·6	7·7	23·4	9·6	10·0	8·7	7·5	7·2	81·1	33·2	52·1	29·0	59·4
1943	49·1	25·2	18·3	6·9	23·9	9·1	9·2	8·8	7·8	7·3	77·5	30·1	47·9	29·6	54·6
1944	45·4	24·4	17·5	6·9	21·1	8·8	8·8	8·0	7·0	6·1	70·9	27·6	44·5	26·3	51·1
1945	46·0	24·8	18·0	6·8	21·3	9·0	9·0	8·2	7·0	6·1	73·4	27·6	45·2	28·1	51·8
1946	42·9	24·5	17·8	6·7	18·4	8·7	9·1	7·1	6·1	5·2	66·9	27·2	44·3	22·6	50·7
1947	41·4	22·7	16·5	6·2	18·6	7·8	8·7	6·9	6·0	5.7	65·0	24·1	40·3	24·6	46·4
1948	33·9	19·7	15·6	4·1	14·2	7·8	7·9	5·5	4·8	3'9	56·9	23·2	38·5	18·4	42·5
1949	32·4	19·3	15·6	3·7	13·0	7·6	8·0	4·8	4·4	3'8	54·6	22·7	38·0	16·7	41·5
1950	29·6	18·5	15·2	3·3	11·1	7·2	8·0	4·3	3·7	3·1	51·7	22·6	37·4	14·3	40·7
1951	29·7	18·8	15·5	3·3	10·9	7·5	8·0	4·1	3·6	3·2	52·2	23·0	38·2	14·0	41·5
1952	27·6	18·3	15·2	3·2	9·3	7·6	7·6	3·7	3·0	2·6	49·6	22·7	37·5	12·1	40·6

* Rates based on related live births from 1926 onwards.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive and numbers of occurrences from 1939.

Table LIV.—Secular Trend of Stillbirths per 1,000 total births, and of Deaths in the Neonatal and Post-neonatal Periods per 1,000 related live births. England and Wales; Standard Regions, 1948 to 1952

	Standard Regions	Rates in each year 1948 to 1952					Rates in 1949 to 1952 per cent of rate in 1948				
		1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
STILLBIRTHS (at or over 28 weeks gestation) per 1,000 live and stillbirths	ENGLAND AND WALES	23·2	22·7	22·6	23·0	22·7	*100*	*98*	*97*	*99*	*98*
	NORTH OF ENGLAND	25·5	24·7	24·3	24·8	24·8	*100*	*97*	*95*	*97*	*97*
	Northern	25·2	24·6	25·8	24·6	24·9	*100*	*98*	*102*	*98*	*99*
	East and West Ridings	24·2	23·5	22·9	24·2	23·9	*100*	*97*	*95*	*100*	*99*
	North Western	26·5	25·5	24·4	25·2	25·2	*100*	*96*	*92*	*95*	*95*
	MIDLANDS AND EAST	23·1	22·2	22·6	23·1	22·2	*100*	*96*	*98*	*100*	*96*
	North Midland	23·9	22·2	23·0	23·1	22·5	*100*	*93*	*96*	*97*	*94*
	Midland	23·5	23·1	23·8	23·9	22·7	*100*	*98*	*101*	*102*	*97*
	Eastern	21·5	20·9	20·6	21·9	21·1	*100*	*97*	*96*	*102*	*98*
	SOUTH OF ENGLAND	20·5	20·2	20·1	20·9	20·2	*100*	*99*	*98*	*102*	*99*
	London and South Eastern	19·9	19·9	19·6	20·8	20·0	*100*	*100*	*98*	*105*	*101*
	Southern	20·9	19·4	18·9	19·4	20·0	*100*	*93*	*90*	*93*	*96*
	South Western	22·4	22·0	22·5	22·3	21·0	*100*	*98*	*100*	*100*	*94*
	WALES	26·8	28·2	27·2	26·4	28·0	*100*	*105*	*101*	*99*	*104*
NEONATAL MORTALITY per 1,000 related live births	ENGLAND AND WALES	19·7	19·3	18·5	18·8	18·3	*100*	*98*	*94*	*95*	*93*
	NORTH OF ENGLAND	21·8	21·2	20·2	20·6	20·3	*100*	*97*	*93*	*94*	*93*
	Northern	21·3	22·0	20·8	21·6	20·2	*100*	*103*	*98*	*101*	*95*
	East and West Ridings	20·7	20·6	19·5	19·1	18·9	*100*	*100*	*94*	*92*	*91*
	North Western	22·6	21·3	20·3	20·9	21·1	*100*	*94*	*90*	*92*	*93*
	MIDLANDS AND EAST	20·1	18·4	18·4	18·5	18·0	*100*	*92*	*92*	*92*	*90*
	North Midland	21·5	18·8	18·9	17·6	18·9	*100*	*87*	*88*	*82*	*88*
	Midland	21·1	19·6	19·4	20·3	18·6	*100*	*93*	*92*	*96*	*88*
	Eastern	16·9	16·2	16·3	16·8	16·2	*100*	*96*	*96*	*99*	*96*
	SOUTH OF ENGLAND	17·1	17·4	16·5	17·0	16·4	*100*	*102*	*96*	*99*	*96*
	London and South Eastern	16·4	16·8	15·9	16·7	15·7	*100*	*102*	*97*	*102*	*96*
	Southern	18·0	17·6	16·7	16·9	16·3	*100*	*98*	*93*	*94*	*91*
	South Western	18·8	19·7	18·5	18·2	18·8	*100*	*105*	*98*	*97*	*100*
	WALES	22·5	22·9	21·6	21·8	20·8	*100*	*102*	*96*	*97*	*92*
POST-NEONATAL MORTALITY per 1,000 related live births	ENGLAND AND WALES	14·2	13·0	11·1	10·9	9·3	*100*	*92*	*78*	*76*	*65*
	NORTH OF ENGLAND	18·9	17·8	14·6	13·8	11·3	*100*	*94*	*77*	*73*	*60*
	Northern	20·5	19·9	16·9	15·5	11·9	*100*	*97*	*82*	*75*	*58*
	East and West Ridings	17·3	15·4	13·3	13·8	11·0	*100*	*89*	*77*	*80*	*64*
	North Western	19·2	18·1	14·2	13·0	11·3	*100*	*94*	*74*	*68*	*59*
	MIDLANDS AND EAST	13·5	12·4	10·6	10·5	9·2	*100*	*92*	*79*	*78*	*68*
	North Midland	15·6	13·8	11·7	11·1	9·6	*100*	*88*	*75*	*71*	*62*
	Midland	14·7	13·8	11·8	11·3	10·2	*100*	*94*	*80*	*77*	*69*
	Eastern	9·1	8·6	7·6	8·6	7·1	*100*	*95*	*84*	*93*	*78*
	SOUTH OF ENGLAND	10·0	8·8	7·8	7·8	6·9	*100*	*88*	*78*	*78*	*69*
	London and South Eastern	10·5	8·8	7·8	7·4	6·9	*100*	*84*	*74*	*70*	*66*
	Southern	8·8	8·6	7·9	8·3	7·1	*100*	*98*	*90*	*94*	*81*
	South Western	9·5	9·1	7·9	8·3	6·8	*100*	*96*	*83*	*88*	*72*
	WALES	16·8	16·4	13·9	14·3	12·5	*100*	*98*	*83*	*86*	*74*

Table LV.—Stillbirths per 1,000 Total Births, Infant Deaths and Deaths in the Early Neonatal, Late Neonatal and Post-neonatal Periods per 1,000 Related Live Births, and Death Rates from the Principal Causes of Infant Mortality; Comparison of Annual and Quarterly Rates. England and Wales, 1952

Ætiological Group	Cause of Death (and International Classification numbers)	Annual Rates (per 1,000 related live births)	Quarterly Rates (Per 1,000 live birth occurrences)*				Quarterly Rates per cent of Annual Rates			
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.
Stillbirths (late fœtal deaths at or over 28 weeks gestation)		**22·7**	**23·7**	**22·3**	**21·5**	**23·3**	*104*	*98*	*95*	*103*
Early Neonatal Deaths (infant deaths at ages under 1 week)		**15·2**	**15·7**	**14·6**	**14·3**	**16·0**	*103*	*96*	*94*	*105*
Late Neonatal Deaths (infant deaths at ages 1 week and under 4 weeks)		**3·2**	**4·0**	**2·7**	**2·6**	**3·3**	*125*	*84*	*81*	*103*
Post-neonatal Deaths (infant deaths at ages 4 weeks and under 1 year)		**9·3**	**13·0**	**7·5**	**6·0**	**10·5**	*140*	*81*	*65*	*113*
Infant deaths (total under 1 year)		**27·6**	**32·7**	**24·8**	**23·0**	**29·8**	*118*	*90*	*83*	*108*
Prenatal and Natal Group (including congenital malformations	Congenital malformations (750-759)	4·6	4·7	4·4	4·2	4·9	*102*	*96*	*91*	*107*
	Total causes mainly of prenatal and natal origin other than congenital malformations	13·4	14·2	12·7	12·4	14·3	*106*	*95*	*93*	*107*
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	5·4	5·5	5·2	4·9	5·9	*102*	*96*	*91*	*109*
	Attributed to maternal toxæmia (769)	0·3	0·4	0·2	0·2	0·2	*133*	*67*	*67*	*67*
	Ill-defined diseases of early infancy (773)	0·4	0·5	0·4	0·4	0·5	*125*	*100*	*100*	*125*
	Postnatal asphyxia and atelectasis (762)	3·7	4·1	3·3	3·4	3·8	*111*	*89*	*92*	*103*
	Intracranial and spinal injury at birth (760)	2·2	2·3	2·1	2·3	2·4	*105*	*95*	*105*	*109*
	Other birth injury (including maternal antepartum hæmorrhage) (761)	0·5	0·5	0·5	0·5	0·5	*100*	*100*	*100*	*100*
	Erythroblastosis (770)	0·7	0·6	0·6	0·6	0·8	*86*	*86*	*86*	*114*
	Hæmorrhagic disease of newborn (771)	0·3	0·3	0·3	0·2	0·3	*100*	*100*	*67*	*100*

	Total causes mainly of postnatal origin	8·3	12·0	6·5	4·8	9·8	*145*	*78*	*58*	*118*
Postnatal Group	Gastro-enteritis (including diarrhœa of newborn) (571, 764)	1·0	1·5	0·8	0·6	1·1	*150*	*80*	*60*	*110*
	Pneumonia and bronchitis (490-493, 763; 500-502) ..	5·0	7·7	3·6	2·7	6·1	*154*	*72*	*54*	*122*
	Causes classified as infective (001-138): others mainly infective in origin (340; 391-393; 470-483; 518, 519; 690-698; 765-768)	1·2	1·5	1·1	0·8	1·4	*125*	*92*	*67*	*117*
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	0·8	1·0	0·6	0·5	0·9	*125*	*75*	*63*	*113*
	Lack of care; neglect (including foundlings); infanticide (E926; E980-E985)	0·2	0·2	0·2	*0·1*	0·2	*100*	*100*	*50*	*100*
	Other accidental causes (remainder E800-E999)	0·1	*0·1*	*0·1*	*0·1*	0·1	*100*	*100*	*100*	*100*
UNCLASSIFIED	Total causes remaining	1·4	1·7	1·2	1·6	0·8	*121*	*86*	*114*	*57*
Immaturity, or with mention of immaturity (774; 776; 760·5-773·5)		9·7	10·1	9·0	8·6	10·6	*104*	*93*	*89*	*109*
Immaturity alone, or primary to diseases other than of early infancy (774, 776)		5·4	5·5	5·2	4·9	5·9	*102*	*96*	*91*	*109*
Immaturity associated with diseases of early infancy (760·5-773·5)		4·3	4·6	3·8	4·0	4·7	*107*	*88*	*93*	*109*
All other causes (760·0-773·0 and remainder)		17·9	22·5	15·8	14·4	19·3	*126*	*88*	*80*	*108*

* Stillbirth rates are per 1,000 total births. Infant mortality rates from all causes are per 1,000 related live births

Table LVI.—Principal Causes of Death Under One Year; Death Rates per 1,000 Related Live Births in England and Wales and Four Regional Groups, 1952, showing the regional rates as percentages of corresponding national rates

Ætiological Group	Cause of Death (and International Classification numbers)	Infant Mortality Rates per 1,000 related live births					Regional Rates per cent of England and Wales rate				
		England and Wales	North of England	Midland and East	South of England	Wales	England and Wales	North of England	Midland and East	South of England	Wales
ALL CAUSES	All Causes	27·6	31·6	27·2	23·3	33·3	*100*	*114*	*99*	*84*	*121*
	Congenital malformations (750-759)	4·6	4·9	4·5	4·2	4·9	*100*	*107*	*98*	*91*	*107*
	Total causes mainly of prenatal and natal origin other than congenital malformations	13·4	14·8	13·0	12·0	15·7	*100*	*110*	*97*	*90*	*117*
Prenatal and Natal Group (including congenital malformations)	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	5·4	6·4	5·0	4·5	6·4	*100*	*119*	*93*	*83*	*119*
	Attributed to maternal toxæmia (769)	0·3	0·3	0·3	0·2	*0·5*	*100*	*100*	*100*	*67*	*167*
	Ill-defined diseases of early infancy (773) ..	0·4	0·5	0·4	0·3	1·1	*100*	*125*	*100*	*75*	*275*
	Postnatal asphyxia and atelectasis (762) ..	3·7	3·8	3·5	3·6	3·6	*100*	*103*	*95*	*97*	*97*
	Intracranial and spinal injury at birth (760) ..	2·2	2·4	2·3	2·1	2·4	*100*	*109*	*105*	*95*	*109*
	Other birth injury (including maternal antepartum hæmorrhage) (761)	0·5	0·6	0·5	0·5	0·6	*100*	*120*	*100*	*100*	*120*
	Erythroblastosis (770)	0·7	0·6	0·7	0·7	0·8	*100*	*86*	*100*	*100*	*114*
	Hæmorrhagic disease of newborn (771) ..	0·3	0·3	0·3	0·2	*0·3*	*100*	*100*	*100*	*67*	*100*
	Total causes mainly of postnatal origin	8·3	10·4	8·3	6·0	10·7	*100*	*125*	*100*	*72*	*129*
Postnatal Group	Gastro-enteritis (including diarrhœa of newborn) (571, 764)	1·0	1·2	1·1	0·6	1·7	*100*	*120*	*110*	*60*	*170*
	Pneumonia and bronchitis (490-493, 763; 500-502)	5·0	6·6	4·9	3·5	6·1	*100*	*132*	*98*	*70*	*122*
	Causes classified as infective (001-138); others mainly infective in origin *	1·2	1·5	1·1	0·9	1·5	*100*	*125*	*92*	*75*	*125*
	Whooping cough; measles (056, 085) ..	0·2	0·3	0·2	0·2	*0·2*	*100*	*150*	*100*	*100*	*100*
	Acute upper respiratory infections and influenza (470-475, 480-483)	0·1	0·2	*0·1*	*0·1*	*0·1*	*100*	*200*	*100*	*100*	*100*
	Otitis media and mastoiditis, empyema, pleurisy (391-393, 518, 519)	0·1	0·2	0·1	*0·1*	*0·1*	*100*	*200*	*100*	*100*	*100*
	Septicæmia, skin and subcutaneous tissue infections, sepsis of newborn (053, 690-698, 765-768)	0·2	0·2	0·1	0·1	*0·4*	*100*	*100*	*50*	*50*	*200*
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019)	0·0	*0·1*	*0·1*	*0·0*	*0·1*					

	Tuberculous meningitis (010)	0·1	*0·1*	*0·1*	*0·0*	*0·1*	*100*	*100*	*100*	*0*	*100*
	Meningococcal infections and non-meningococcal meningitis (057, 340)	0·3	0·4	0·3	0·3	*0·3*	*100*	*133*	*100*	*100*	*100*
	Causes classified as infective not specified above (remainder 001-138)	0·1	0·2	0·1	0·1	*0·2*	*100*	*200*	*100*	*100*	*200*
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) ..	0·8	0·8	0·9	0·6	1·1	*100*	*100*	*113*	*75*	*138*
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	0·2	0·1	0·3	0·2	*0·2*	*100*	*50*	*150*	*100*	*100*
	Other accidental causes (remainder E800-E999)	0·1	0·1	*0·1*	0·1	*0·1*	*100*	*100*	*100*	*100*	*100*
	Total causes remaining	1·4	1·5	1·4	1·1	2·1	*100*	*107*	*100*	*79*	*150*
UNCLASSIFIED	Neoplasms (140-239)	0·1	0·1	0·1	0·1	*0·1*	*100*	*100*	*100*	*100*	*100*
	Other remaining causes	1·2	1·4	1·2	0·9	2·0	*100*	*117*	*100*	*75*	*167*
Immaturity, or with mention of immaturity (774; 776; 760·5-773·5)		9·7	10·9	9·3	8·5	11·4	*100*	*112*	*96*	*88*	*118*
Immaturity alone, or primary to dis. other than of early infancy (774, 776)		5·4	6·4	5·0	4·5	6·4	*100*	*119*	*93*	*83*	*119*
Immaturity associated with diseases of early infancy (760·5-773·5)		4·3	4·4	4·3	4·0	5·1	*100*	*102*	*100*	*93*	*119*
All other causes (760·0-773·0 and remainder)		17·9	20·7	17·9	14·8	21·9	*100*	*116*	*100*	*83*	*122*

* 340, 391-393, 470-483, 518, 519, 690-698, 765-768.

Table LVII.—Secular Trend of Total and Illegitimate Stillbirths per 1,000 total births, and of Total and Illegitimate Deaths in Early Neonatal, Late Neonatal and Post-neonatal Periods per 1,000 related live births. England and Wales, 1936-1939 and 1940 to 1952

			1936 to 1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
All Infants	Stillbirths (Late fœtal deaths at or over 28 weeks)	Annual rate	38·8	37·2	34·8	33·2	30·1	27·6	27·6	27·2	24·1	23·2	22·7	22·6	23·0	22·7
		per cent of 1936–39	*100*	*96*	*90*	*86*	*78*	*71*	*71*	*70*	*62*	*60*	*59*	*58*	*59*	*59*
	Early neonatal deaths (Under 1 week)	Annual rate	21·6	21·3	20·7	19·6	18·3	17·5	18·0	17·8	16·5	15·6	15·6	15·2	15·5	15·2
		per cent of 1936–39	*100*	*99*	*96*	*91*	*85*	*81*	*83*	*82*	*76*	*72*	*72*	*70*	*72*	*70*
	Late neonatal deaths (1 week and under 4 weeks)	Annual rate	7·6	8·3	8·3	7·7	6·9	6·9	6·8	6·7	6·2	4·1	3·7	3·3	3·3	3·2
		per cent of 1936–39	*100*	*109*	*109*	*101*	*91*	*91*	*89*	*88*	*82*	*54*	*49*	*43*	*43*	*42*
	Post-neonatal deaths (4 weeks and under 1 year)	Annual rate	25·8	27·2	31·1	23·4	23·9	21·1	21·3	18·4	18·6	14·2	13·0	11·1	10·9	9·3
		per cent of 1936–39	*100*	*105*	*121*	*91*	*93*	*82*	*83*	*71*	*72*	*55*	*50*	*43*	*42*	*36*
Illegitimate Infants	Stillbirths (late fœtal deaths at or over 28 weeks)	Annual rate	49·6	47·6	45·8	40·8	37·5	34·3	31·5	33·2	30·6	31·6	29·5	29·1	31·6	29·7
		per cent of 1936–39	*100*	*96*	*92*	*82*	*76*	*69*	*64*	*67*	*62*	*64*	*59*	*59*	*64*	*60*
	Early neonatal deaths (under 1 week)	Annual rate	34·4	31·2	29·8	30·0	27·0	25·2	24·3	23·7	23·5	22·0	24·9	21·4	21·4	21·3
		per cent of 1936–39	*100*	*91*	*87*	*87*	*78*	*73*	*71*	*69*	*68*	*64*	*72*	*62*	*62*	*62*
	Late neonatal deaths (1 week and under 4 weeks)	Annual rate	10·9	12·8	11·2	10·7	9·3	10·3	10·0	9·6	9·9	5·5	4·8	4·5	4·3	3·9
		per cent of 1936–39	*100*	*117*	*103*	*98*	*85*	*94*	*92*	*88*	*91*	*50*	*44*	*41*	*39*	*36*
	Post-neonatal deaths (4 weeks and under 1 year)	Annual rate	41·6	38·4	41·3	34·3	35·1	33·0	30·5	26·9	24·7	17·9	15·1	13·6	12·8	9·8
		per cent of 1936–39	*100*	*92*	*99*	*82*	*84*	*79*	*73*	*65*	*59*	*43*	*36*	*33*	*31*	*24*

TUBERCULOSIS

In 1952, 10,585 people died of tuberculosis, 7,114 males and 3,471 females. This was 36 per cent less than the average for 1949-51 (36 per cent less for respiratory tuberculosis and 37 per cent less for other forms). Deaths from respiratory diseases are normally more frequent in the winter months and tuberculosis follows this rule. In December 1952 the London area experienced a lethal smog. That this may have increased the number of deaths from bronchitis and pneumonia without affecting those from respiratory tuberculosis to any marked extent, is suggested by the following comparison :—

		Deaths in 1952 per cent of average deaths in 1948-51		
		Greater London	Rest of England and Wales	England and Wales, December only
Respiratory tuberculosis	M.	*67*	*66*	*85*
	F.	*53*	*49*	*64*
Bronchitis	M.	*123*	*88*	*185*
	F.	*114*	*76*	*167*
Pneumonia	M.	*106*	*92*	*149*
	F.	*102*	*93*	*143*

Respiratory tuberculosis—morbidity

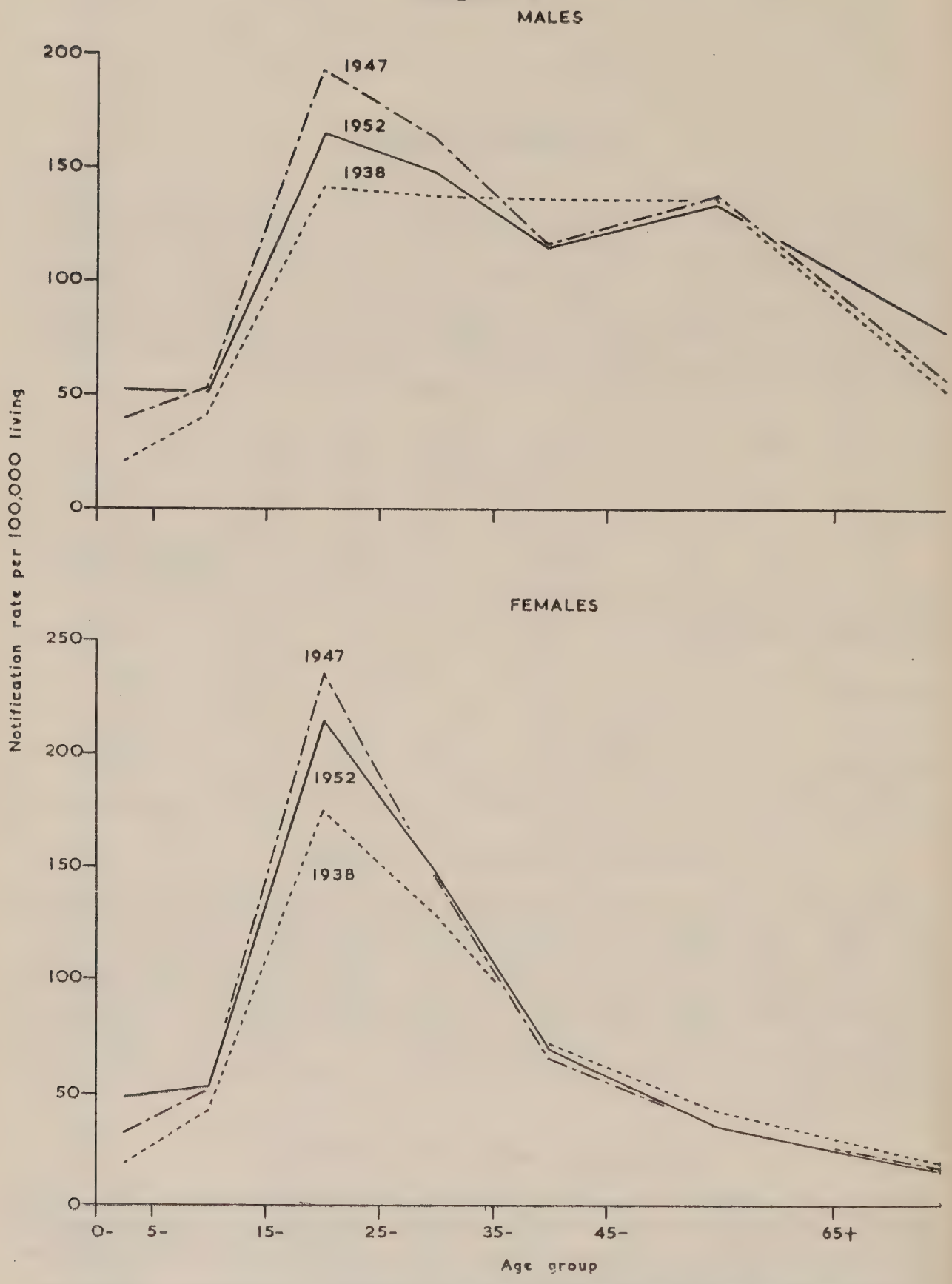
Notification rates in 1952 were on the whole very slightly lower than in 1951 (Table LVIII, page 115). Diagram 8 compares the notification rates for men and women at various ages in 1938, 1947 and 1952. In each sex notifications were highest for the age group 15-24. The 'dip' in male notification rates at ages 35-44 first became apparent in 1944 and has continued ever since. There is a secondary peak in male notification rates at ages 45-64, but no corresponding increase in female rates, a sex difference in age distribution that so far remains unexplained.

Respiratory tuberculosis—mortality

The trend of death rates from respiratory tuberculosis (Table LIX, page 116) was towards lower rates in 1952 than the previous year, except for boys of 10-14 for whom numbers are small and women of 75 and over. The 1952 rates, as percentages of those in1931-35 were as follows :—

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 & over
Male	*18*	*10*	*16*	*7*	*11*	*21*	*25*	*37*	*70*	*117*	*163*
Female	*24*	*12*	*4*	*7*	*15*	*25*	*26*	*28*	*38*	*49*	*95*

Diagram 8



Respiratory tuberculosis: Notification rates per 100,000 living, 1938, 1947 and 1952

The decline in rates was very marked at ages 15-19; for men aged 25-44 and women of 25-54, the average decrease was much the same, around 75 per cent, and men aged 45-54 showed the same decrease in rates as women ten years older. At ages 75 and over there was a decrease of only 5 per cent in women's rates, and male rates in the two age groups of 65-74 and 75 and over were 117 and 163 per cent of what they had been in 1931-35. The Comparative Mortality Index for respiratory tuberculosis (Table LX, page 117), which takes into account the changing age structure of the population, showed sharp decreases

from the 1951 figures for both sexes. There were also substantial decreases in the C.M.I.s for tuberculosis of other sites, especially of the meninges and central nervous system.

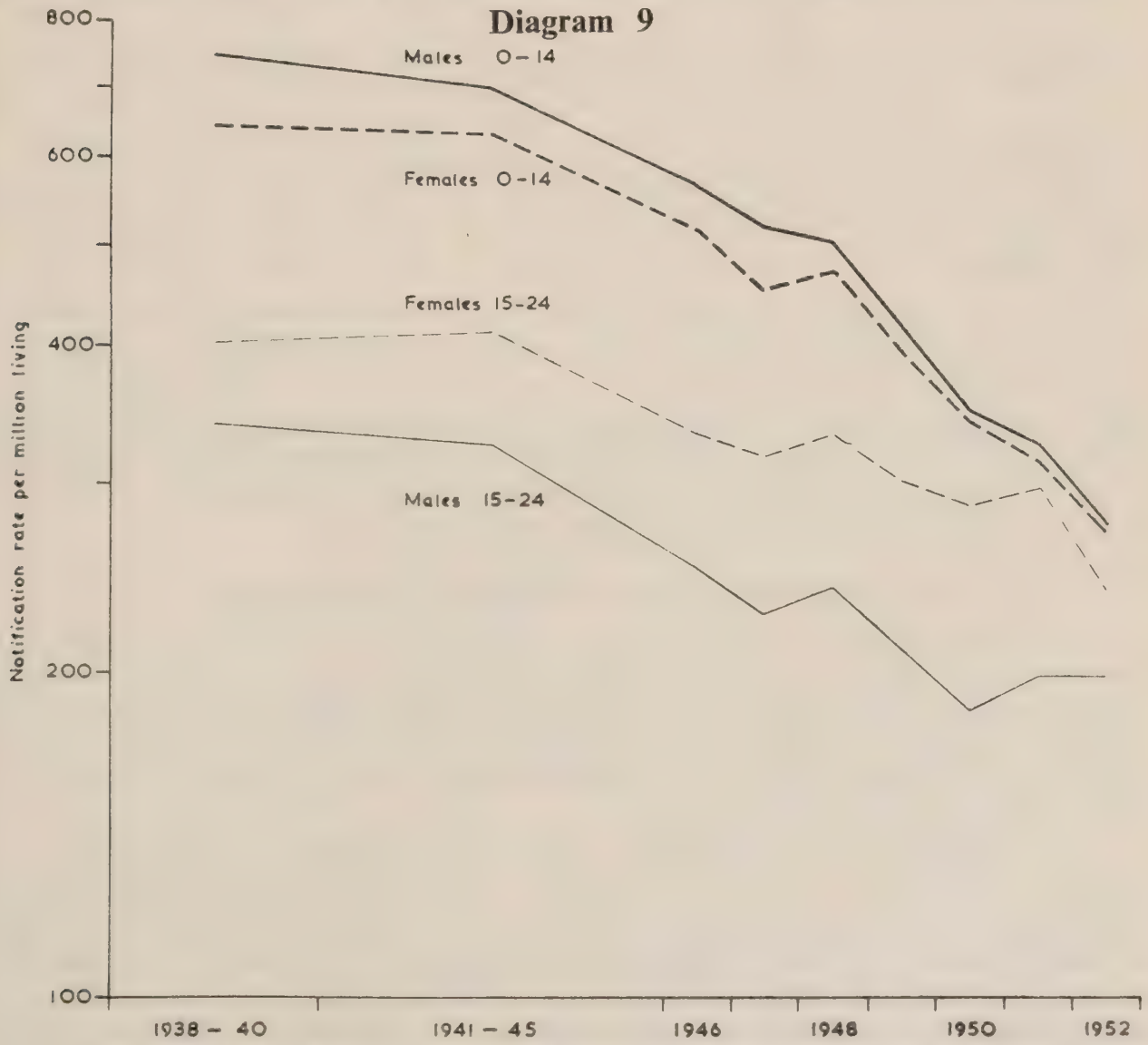
Non-respiratory tuberculosis—morbidity

The following table shows the notification rates per million living by sex and age from tuberculosis of all sites (other than respiratory) combined since 1938.

	Males					Females				
	All Ages	0–	15–	25–	45 & over	All Ages	0–	15–	25–	45 & over
1938-40	290	744	341	151	72	264	641	403	172	61
1941-45	269	698	326	148	64	261	632	413	178	63
1946	217	569	250	123	53	210	518	334	149	47
1947	202	518	227	114	54	196	455	317	144	51
1948	197	505	243	99	53	199	473	333	138	46
1949	171	423	211	93	50	174	399	304	127	40
1950	151	350	186	93	48	164	343	288	139	39
1951	149	327	196	98	48	159	314	300	131	46
1952	135	275	196	91	50	146	272	242	135	54

While there has been a general downward trend in each age-group shown, the rate of decline has been much swifter in the younger age groups. Diagram 9 shows not only the rate of decrease at ages 0-14 as compared with 15-24, but

Diagram 9



Non-respiratory tuberculosis: Notification rates per million living at ages 0-14 and 15-24 by sex in 1938-40, 1941-45 and 1946 to 1952

also shows that the sex-differential in favour of females at ages under 15 is becoming less pronounced. At ages 15-24, however, the female rates were considerably in excess of the male and their decline has been slower.

Non-respiratory tuberculosis—mortality

Table LXI (page 118) shows the death rates from non-respiratory tuberculosis, distinguishing meninges and central nervous system from other sites. The most recent decline in death rates is not so marked in the latter as in the former, where for example, the male rate at ages 5-14 in 1952 and most of the female rates were little more than half those in the preceding year. Of the remaining sites, those which chiefly contributed to the death rates were intestines and peritoneum, bones and joints, the genito-urinary system and disseminated tuberculosis. The death rates per million and total number of deaths for these were as follows:—

Age Group	Intestines & Peritoneum		Bones & Joints		Genito-urinary		Disseminated Tuberculosis	
	Males	Females	Males	Females	Males	Females	Males	Females
0–4	6·7	1·8	1·7	1·8	—	—	9·5	6·4
5–14	1·2	1·6	0·6	0·6	0·6	—	0·3	1·3
15–24	1·8	2·1	3·3	1·4	6·3	0·7	1·5	3·9
25–44	1·9	2·4	4·4	1·2	8·8	4·3	1·7	1·2
45–64	4·2	3·0	6·6	4·0	10·4	4·5	3·6	2·4
65 & over	6·5	6·5	17·5	10·3	8·5	3·4	4·5	4·4
All Ages Rates	3·2	2·9	5·2	3·1	6·8	2·9	2·8	2·7
All Ages **Numbers**	**67**	**66**	**110**	**70**	**144**	**66**	**60**	**61**

The highest number of male deaths was from tuberculosis of the genito-urinary system, the rates being fairly uniform in the age-groups from 25 onwards. In contrast was the male rate for tuberculous bones and joints where there was a steady increase with increasing age, to a rate of 17·5 at 65 and over. Rates for disseminated tuberculosis were high for children under five, for young women aged 15-24 and at ages 65 and over in each sex.

Regional distribution of respiratory tuberculosis

Notification rates per 100,000 living are shown in Table LXII (page 119), for standard regions, county boroughs and counties. At ages 25-44, London and the South Eastern region and also the Northern region were well above the national average for both men and women, and so was Wales for the latter. Table LXIII (page 125) shows administrative counties grouped according to the size of their notification rates.

If it be conceded that notification rates are incomplete, and that there is no regional uniformity in their incompleteness, we may to a certain extent regard this tabulation as showing the comparative success with which cases are discovered, as well as indicating relative incidence of the disease. This might, for example, account for Bedford coming high up on the list for both males and females. A high incidence rate for tuberculosis is commonly associated with a high degree of urbanisation, and hence the rates for county boroughs are expected to exceed those for administrative counties. It is interesting, therefore, to compare

the notification and death rates in 1952 in the two types of area, for those counties in which county boroughs are situated. (Rates per 100,000 living in both cases.) This has been done in Table LXIV (page 127).

With the exception that in a few counties the female death rate in the administrative county was a little higher than in the county boroughs, the following counties had notification and death rates lower than those in the corresponding county boroughs:—

Berkshire, Derbyshire, Gloucestershire, Leicestershire, Lincolnshire (Lindsey), Norfolk, Northamptonshire, Nottinghamshire, Oxfordshire, Southampton, Suffolk (East), Warwickshire, Worcestershire, Yorkshire, East and North Ridings.

These are counties in which the administrative counties are predominantly rural in character.

In no case were both notification and death rates higher in the administrative county than in the county borough, though in Somerset this was true of all but the female death rate.

Of the remaining counties:—

Cheshire; notification rates in the administrative county were lower than in the county boroughs, but the death rates were higher than in Chester. Chester and Wallasey had similar notification rates, but the death rates were higher in the latter. Stockport had comparatively low notification rates.

Cumberland; notification rates were lower but male death rates higher in the administrative county than in the county borough.

Devonshire; Male notification and death rates in Exeter were exceptionally high for a town of this type; the notification rate in the county was much lower than in the county boroughs, but the male death rate was as high as in Plymouth.

Durham; the notification rates in West Hartlepool were very low, but the death rates were high compared with Darlington which had higher notification rates.

Essex; West Ham had the lowest male notification and the highest death rates. The notification rates in the administrative county were similar to those in East Ham, but the death rates were higher in the latter.

Kent; notification rates in the administrative county were in excess of those in the county borough, where the female notification rate was particularly low, but death rates were similar.

Lancashire; there was a wide variation in notification rates among county boroughs, from 240 for males and 196 for females in Bootle to 61 for males and 26 for females in Bury. Death rates in the county boroughs varied from 59 for males in Manchester and 52 in Bootle to 14 in Wigan and for females from 34 in Bootle to 2 in Southport. Both notification and death rates in the administrative county were higher than in several county boroughs.

Surrey; notification rates in both county and county borough were very similar; death rates were higher in the latter.

Sussex; Brighton had high notification rates in comparison with Eastbourne and Hastings, whose male rates were also exceeded by that of the administrative county, but male death rates were lower in the latter.

Yorkshire: West Riding; Wakefield continued to hold a record low place for notification and death rates and in several other county boroughs notification rates were lower than in the administrative county. Barnsley in particular combined low male notification with high death rates.

A high death rate in any area indicates that there has been a large number of advanced, and presumably infective, cases. In such circumstances we might also expect high notification rates. For English county boroughs the correlation between death and notification rates was 0·49 for males and 0·53 for females.

Table LXV (page 128) shows the death rates per million by regions and conurbations, as well as counties and county boroughs. In the conurbations these rates were as follows:—

Conurbation	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages
Tyneside	25	—	158	418	1,086	907	487	28	—	200	418	234	159	225
West Yorkshire ..	14	19	44	205	518	611	264	—	—	57	210	122	130	116
Merseyside	—	—	99	376	965	975	401	14	—	184	404	207	181	208
S.E. Lancs.	37	6	78	318	873	967	415	30	—	133	253	162	179	157
W. Midlands ..	39	—	102	283	945	903	381	30	18	207	205	176	166	152

Diagram 10 shows the marked similarity between female death rates on Tyneside and Merseyside and again in the South East Lancashire and West Yorkshire conurbations. There was a similarity between male death rates in the working ages up to 65 on Tyneside and Merseyside and rates were only a little less in the West Midlands and South East Lancashire conurbations. Much lower rates obtained in the West Yorkshire conurbation.

Death rates of children under 15 in regions, counties and county boroughs from tuberculous meningitis and other non-respiratory tuberculosis are shown in Table LXVI (page 133). Among the regions rates were highest for children of both sexes in the North Western.

Respiratory tuberculosis—mortality by social class

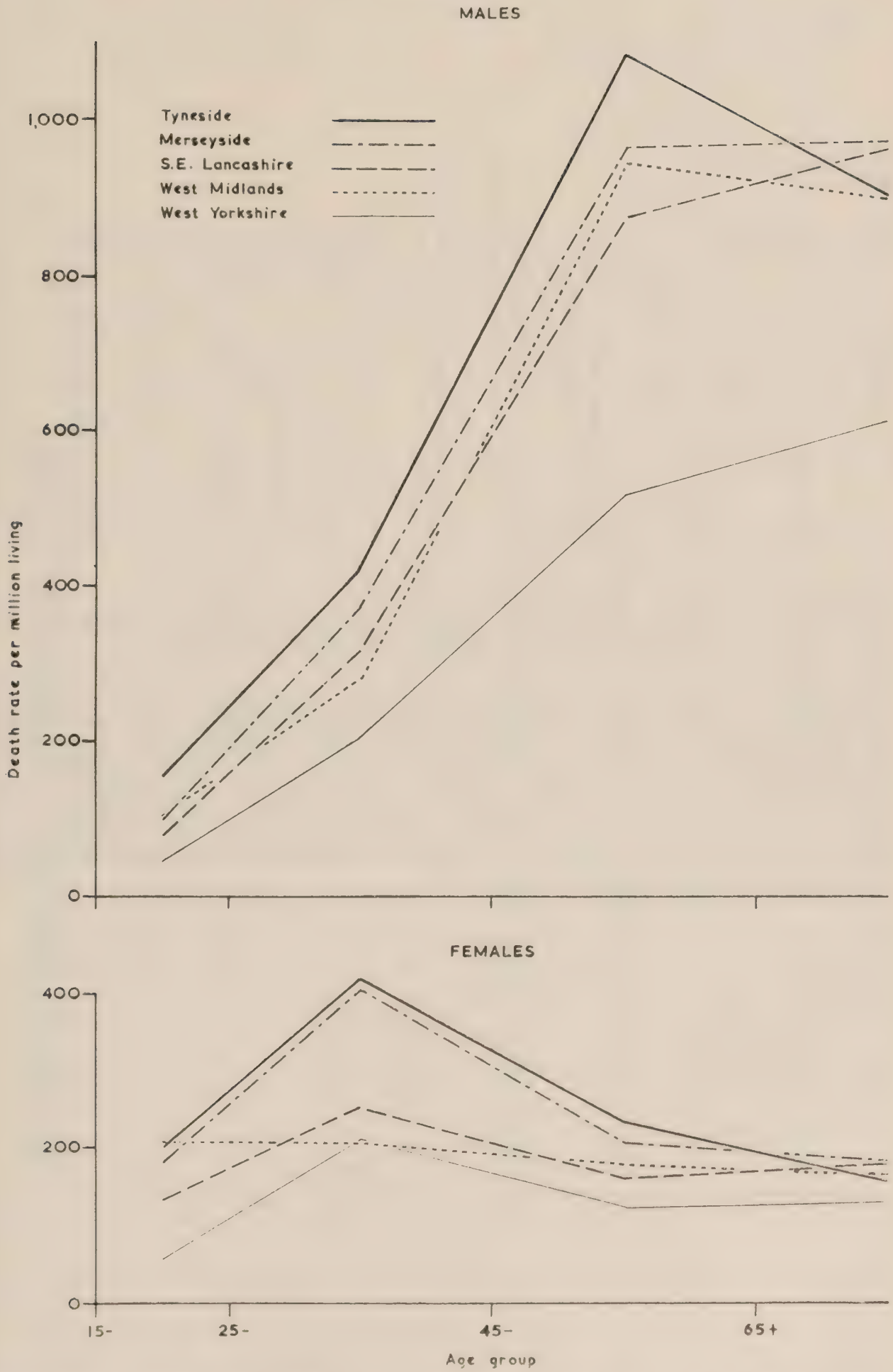
Table LXVII (page 135) shows the deaths by social class and certain broad occupational groups in 1950 and the standardized mortality ratios,* for men and married women aged 20 to 64. From Diagram 11 it will be seen that the S.M.Rs. of men in Social Classes I and II were approximately equal, and also those in Classes III and IV. In Social Class V the S.M.R. was 149, 2·3 times that in Class I. The same general trend was apparent in the deaths of wives of men in these social classes.

Within the social sub-classes, mortality was apparently very high among the armed forces (S.M.R. 213), dock labourers (S.M.R. 171) and hewers and getters of coal (S.M.R. 162). The wives of men in these sub-classes also had S.M.R.s well above the average (288, 171 and 161 respectively) though in respect of wives of members of the armed forces, at any rate, it is believed that the ratio may have been artificially inflated by reason of the method of computation employed.

From the age of 60 onwards, a number of men are described in the Census schedules as unoccupied, and so are not assigned to any of the social classes, whereas their previous occupation is elicited at death registration; this leads to an inflation of the death rates of occupied or retired men. Because of this

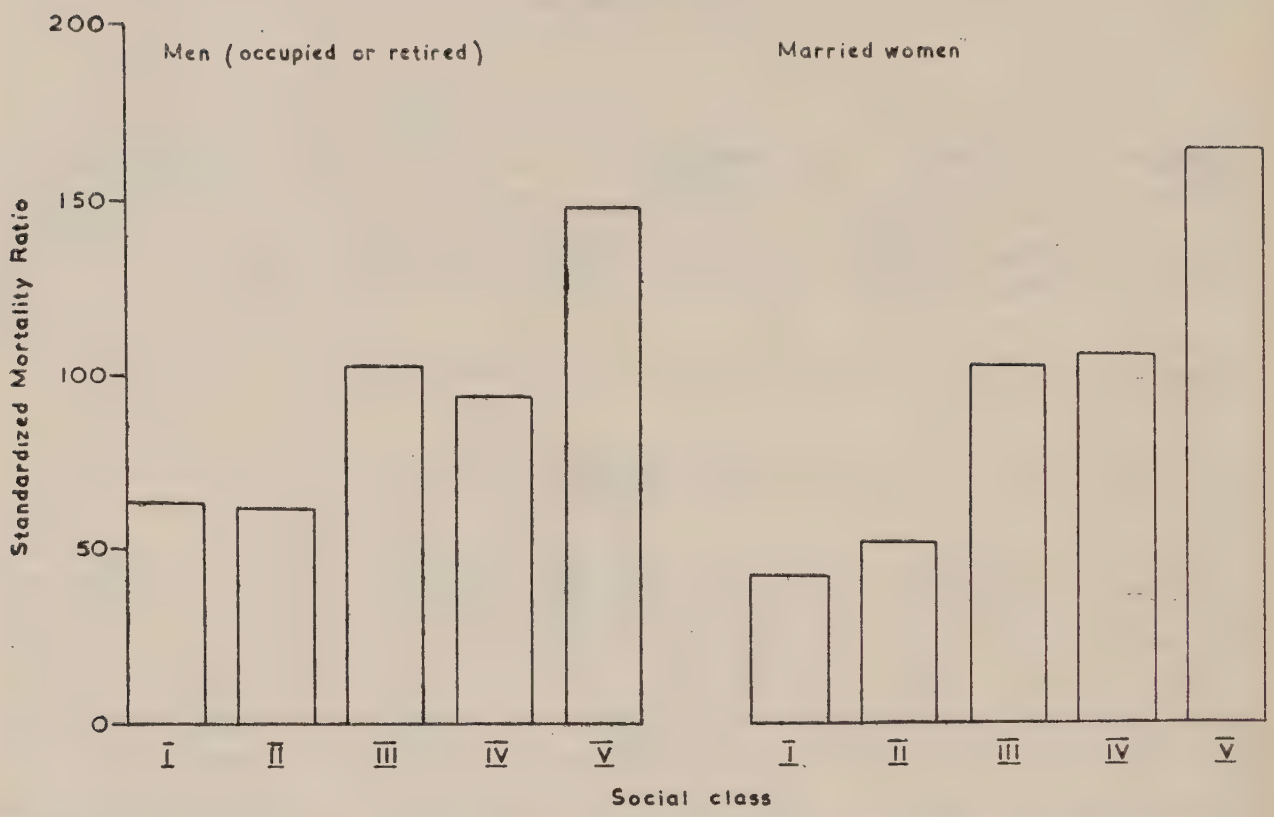
* *See* The Registrar General's Decennial Supplement. England and Wales, 1951. Occupational Mortality, Part I. H.M.S.O., 1954. Price 7s. 6d. net.

Diagram 10



Respiratory tuberculosis : Death rates per million living according to sex and age (15 and over) in various conurbations

Diagram 11



Respiratory tuberculosis: Standardized Mortality Ratios of occupied and retired men and married women aged 20-64 in each social class, 1950

and other difficulties, the comparison in Table LXVIII (page 136), of deaths by social class among men and married women aged 65 and over has been based on proportionate mortality; similar rates are also given for those aged 20-64, for the sake of interest. In Social Class II, 58 out of every 10,000 deaths of men aged 65 and over were due to respiratory tuberculosis compared with 133 in Class V. The proportionate mortality of 99 in Social Class III was in excess of that of 86 in Class IV, whereas for married women there was little difference in the proportions (39 and *38* respectively).

Table LVIII.—Tuberculosis of respiratory system: Notification rates per 100,000 living by sex and age, 1938 to 1952

	All ages	0–	5–	15–	25–	35–	45–	65 and over
Males								
1938 ...	108	20	42	141	137	136	136	52
1939 ...	98	17	32	132	124	124	125	46
1940 ...	104	17	29	145	146	128	123	43
1941 ...	115	20	33	154	155	148	141	50
1942 ...	117	22	38	165	148	153	142	49
1943 ...	119	27	40	166	144	154	152	50
1944 ...	122	30	41	180	158	142	149	56
1945 ...	118	32	40	178	160	135	142	53
1946 ...	119	32	46	179	174	125	138	54
1947 ...	118	40	53	193	163	116	137	56
1948 ...	117	44	51	215	161	117	139	64
1949 ...	119	46	49	180	159	122	146	68
1950 ...	111	53	49	159	154	107	135	67
1951 ...	115	53	48	170	156	117	141	72
1952 ...	112	52	51	165	147	116	135	77
Females								
1938 ...	77	18	42	175	129	72	42	19
1939 ...	71	15	33	166	116	68	37	18
1940 ...	70	17	30	168	120	66	35	16
1941 ...	76	19	33	185	126	69	41	19
1942 ...	78	20	34	204	130	70	37	18
1943 ...	83	26	40	209	142	73	40	18
1944 ...	86	26	40	227	150	75	38	16
1945 ...	81	26	41	223	140	69	34	16
1946 ...	80	28	49	213	141	65	35	16
1947 ...	83	33	51	235	146	66	35	17
1948 ...	86	46	58	244	151	68	35	17
1949 ...	85	44	53	238	155	71	35	17
1950 ...	82	43	52	238	152	69	31	16
1951 ...	81	50	52	229	149	68	33	16
1952 ...	80	49	53	216	148	71	35	16

Table LIX.—Tuberculosis of respiratory system: Death rates per million living by sex and age, 1931-45 and 1946 to 1952

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males											
1931–35	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936–40	61	20	44	366	742	785	937	1,210	1,216	718	296
1941–45	76	24	34	339	581	674	811	1,114	1,203	741	295
1946	68	22	23	239	481	615	687	1,020	1,165	768	340
1947	77	15	29	241	500	632	679	1,034	1,213	812	267
1948	56	*10*	14	211	445	603	633	961	1,166	881	334
1949	33	*6*	*13*	127	368	496	591	869	1,153	927	380
1949*	34	*7*	14	127	366	497	592	869	1,159	937	400
1950*	38	*9*	*8*	78	229	395	428	751	1,024	891	411
1951*	30	*7*	*7*	46	171	292	364	636	978	953	464
1952*	15	*4*	*10*	35	102	201	287	503	829	843	447
Females											
1931–35	74	43	143	840	1,138	911	646	475	394	306	170
1936–40	55	24	98	658	1,016	759	511	377	339	272	160
1941–45	72	24	76	591	916	692	427	304	269	220	123
1946	60	25	69	468	842	662	382	261	242	207	119
1947	70	24	63	502	899	730	411	267	249	224	133
1948	52	19	53	462	812	702	367	255	235	218	105
1949	33	*9*	30	349	684	622	348	253	245	229	127
1949*	33	*10*	30	351	682	622	348	254	249	236	139
1950*	29	*8*	15	199	429	444	273	229	212	212	144
1951*	25	*8*	*14*	108	278	347	238	192	180	198	135
1952*	18	*5*	*6*	58	169	230	166	131	148	150	159

* According to the 6th (1948) Revision of the International List. Throughout the rest of the table rates are according to the 5th (1938) Revision.

Table LX.—Tuberculosis: Comparative Mortality Indices for various sites, 1931 to 1952

	All forms		Respiratory		Meninges and C.N.S.		Intestines, peritoneum, etc.		Bones and joints		Other forms	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1931	**1·39**	**1·47**	1·38	1·47	1·44	1·39	1·75	1·91	1·53	1·72	1·24	1·23
1932	**1·30**	**1·38**	1·27	1·36	1·38	1·28	1·78	1·65	1·45	1·88	1·28	1·34
1933	**1·29**	**1·34**	1·29	1·35	1·21	1·18	1·50	1·72	1·46	1·52	1·19	1·10
1934	**1·20**	**1·24**	1·19	1·24	1·22	1·22	1·34	1·45	1·41	1·56	1·07	1·12
1935	**1·13**	**1·16**	1·13	1·18	1·10	1·01	1·23	1·31	1·29	1·39	0·97	0·98
1936	**1·09**	**1·10**	1·09	1·11	1·06	1·00	1·08	1·23	1·21	1·33	1·02	0·95
1937	**1·08**	**1·12**	1·08	1·12	1·04	1·02	1·19	1·09	1·12	1·24	1·04	1·12
1938	**1·00**	**1·00**	1·00	1·00	1·00	1·00	1·00	1·00	1·00	1·00	1·00	1·00
1939	**1·01**	**0·99**	1·02	1·00	0·92	0·93	0·96	0·92	1·05	1·14	0·98	0·93
1940	**1·18**	**1·08**	1·22	1·09	1·06	1·07	1·09	1·05	1·10	0·99	0·92	1·05
1941	**1·28**	**1·11**	1·36	1·09	1·42	1·37	1·27	1·00	1·03	1·11	1·32	1·12
1942	**1·19**	**0·99**	1·27	0·97	1·20	1·13	1·27	1.08	1·30	1·06	1·13	0·99
1943	**1·26**	**0·98**	1·33	0·96	1·13	1·14	1.02	0·96	1·22	0·99	1·14	0·98
1944	**1·21**	**0·92**	1·27	0·91	1·05	1·02	0·97	0·81	1·05	0·94	1·11	1·00
1945	**1·17**	**0·92**	1·23	0·91	1·01	1·04	0·93	0·71	1·01	0·81	1·08	0·92
1946	**0·94**	**0·86**	0·97	0·86	0·88	0·89	0·69	0·53	0·69	0·80	0·81	0·86
1947	**0·90**	**0·89**	0·93	0·92	0·81	0·81	0·56	0·62	0·58	0·66	0·83	0·86
1948	**0·83**	**0·82**	0·87	0·85	0·64	0·70	0·45	0·51	0·54	0·65	0·70	0·68
1949	**0·76**	**0·72**	0·80	0·77	0·55	0·56	0·39	0·37	0·39	0·48	0·64	0·49
1950	**0·62**	**0·55**	0·66	0·58	0·42	0·48	0·23	0·25	0·38	0·39	0·47	0·44
1951	**0·55**	**0·45**	0·58	0·46	0·43	0·46	0·21	0·24	0·29	0·35	0·43	0·39
1952	**0·44**	**0·31**	0·47	0·32	0·26	0·26	0·17	0·16	0·28	0·26	0·37	0·32

Table LXI.—Tuberculosis of meninges and central nervous system, and other non-respiratory tuberculosis: Death rates per million living by sex and age, 1938-40, 1941-45 and 1946 to 1952

	Males							Females						
	All ages	0–	5–	15–	25–	45–	65 & over	All ages	0–	5–	15–	25–	45–	65 & over
	Tuberculosis of meninges and central nervous system													
1938–40 ...	45	289	73	41	14	6	*2*	40	273	77	48	11	4	*2*
1941–45 ...	50	308	87	51	15	6	*1*	45	282	90	65	14	4	*1*
1946 ...	40	222	80	42	11	7	*3*	36	199	82	52	12	*3*	*0*
1947 ...	39	215	68	39	12	8	*1*	34	184	66	52	11	4	*1*
1948 ...	31	179	47	30	9	7	*3*	30	166	54	44	10	*3*	*2*
1949 ...	27	153	40	26	8	5	*4*	24	126	40	33	10	4	*1*
1950 ...	20	103	32	20	7	7	*3*	20	116	31	31	6	4	*2*
1951 ...	21	109	30	19	9	5	*3*	19	102	34	30	8	*3*	*1*
1952 ...	13	67	15	13	6	4	*1*	11	57	18	16	5	*2*	*1*
	Other non-respiratory tuberculosis													
1938–40 ...	69	148	42	85	61	63	60	53	114	35	72	48	40	50
1941–45 ...	63	134	40	77	57	58	52	50	101	35	72	45	37	50
1946 ...	48	87	24	51	48	50	44	39	64	25	53	38	30	40
1947 ...	46	92	29	46	41	48	43	39	65	27	57	37	34	29
1948 ...	40	57	20	41	37	49	40	33	56	18	39	31	28	38
1949 ...	34	34	15	38	32	42	41	24	33	8	26	24	26	25
1950 ...	26	24	10	25	27	31	41	20	20	7	22	16	23	30
1951 ...	23	17	*5*	19	25	30	37	18	15	*5*	14	13	25	34
1952 ...	20	19	*3*	14	18	29	44	14	*10*	*4*	9	11	17	30

Table LXII.—Respiratory tuberculosis: Notification rates per 100,000 living by sex and age for Standard Regions, County Boroughs and Administrative Counties, 1952

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
England and Wales	**52**	**51**	**165**	**131**	**135**	**77**	**112**	**49**	**53**	**216**	**109**	**35**	**16**	**80**
Standard Regions:														
Northern	48	67	183	142	161	61	124	55	74	304	136	39	22	108
East and West Ridings	51	53	120	115	131	72	100	49	50	171	91	28	13	67
North Western	57	64	167	122	139	85	114	56	68	234	102	31	15	82
North Midland	41	57	152	103	115	63	96	42	58	190	90	30	20	73
Midland	66	70	161	129	148	77	119	66	69	211	102	35	14	84
Eastern	47	33	131	114	107	57	91	40	40	152	93	34	15	64
London and South Eastern	49	46	213	158	154	99	133	42	47	222	120	41	19	85
Southern	28	34	110	110	117	75	90	26	40	146	102	35	16	66
South Western	19	35	139	122	117	58	95	*14*	44	200	98	31	13	67
Wales	61	66	186	133	145	84	122	52	60	260	125	37	20	93

Table LXII.—*continued.*

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
Administrative Counties:														
Bedfordshire	*70*	*24*	157	190	141	*145*	135	*97*	*71*	276	142	*47*	*20*	109
Berkshire	*31*	*21*	*78*	96	96	*74*	75	*27*	*27*	121	97	*33*	*11*	59
Buckinghamshire	*13*	*18*	93	105	109	*63*	80	*24*	*45*	185	95	*38*	*8*	71
Cambridgeshire	*39*	*19*	196	115	130	*65*	104	*32*	*43*	179	*76*	*29*	—	61
Cheshire	*24*	41	91	70	87	80	69	*31*	*26*	146	52	*14*	*5*	41
Cornwall	*14*	*30*	159	137	105	*75*	100	*8*	*33*	171	107	*25*	*7*	61
Cumberland	*19*	*16*	187	162	183	*140*	129	*13*	*67*	288	168	*27*	*16*	109
Derbyshire	*40*	45	107	83	95	83	79	*33*	48	146	78	*22*	*19*	59
Devon	—	*21*	84	77	69	*23*	54	*12*	*25*	116	59	*19*	*13*	38
Dorset	*9*	*38*	*81*	58	86	*71*	63	*27*	*39*	*98*	101	*42*	*16*	59
Durham	58	57	158	128	141	*45*	109	47	63	271	111	29	*20*	94
Ely, Isle of	—	*105*	*119*	*57*	*82*	*44*	70	*44*	*71*	*152*	*45*	*30*	*20*	58
Essex	40	29	182	131	112	76	104	42	33	148	96	34	*12*	65
Gloucestershire	*21*	*16*	186	140	100	*49*	96	*6*	*28*	238	90	*32*	*13*	65
Herefordshire	*51*	*47*	*110*	*101*	*87*	*31*	79	*87*	*98*	*226*	*90*	*12*	*10*	77
Hertfordshire	75	*46*	148	109	110	*64*	98	*47*	*20*	144	97	39	*24*	66
Huntingdonshire	—	*18*	*111*	*142*	*57*	—	73	*32*	*24*	*205*	*80*	*25*	*22*	62
Kent	41	44	180	142	144	61	116	34	59	223	113	42	25	82
Lancashire	56	51	135	104	114	66	95	42	38	187	90	23	*12*	64
Leicestershire	*7*	*17*	88	79	98	*43*	67	*28*	*38*	161	89	*25*	*37*	66
Lincolnshire (Parts of Holland)	*20*	*73*	*85*	*87*	*78*	*23*	70	—	*54*	*117*	*58*	*9*	*16*	45
Lincolnshire (Parts of Kesteven)	*16*	*21*	*107*	*98*	*67*	*47*	70	*18*	*43*	*247*	*53*	*51*	*11*	64
Lincolnshire (Parts of Lindsey)	*7*	*29*	137	84	81	*24*	70	*14*	*30*	155	48	*15*	*16*	46
London	60	55	260	198	210	151	174	65	63	266	157	54	24	112
Middlesex	55	38	194	139	133	87	118	30	34	238	104	36	17	79

Table LXII.—*continued.*

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
Administrative Counties—*contd.*														
Norfolk	*26*	*21*	100	68	107	*50*	69	*32*	*25*	140	83	*34*	*21*	58
Northamptonshire	*9*	*22*	153	78	68	*27*	63	—	*31*	*95*	61	*20*	*30*	41
Northumberland	*21*	*58*	211	124	123	*64*	110	*30*	*51*	270	149	*29*	*19*	96
Nottinghamshire	*47*	*42*	117	86	98	*46*	79	*44*	65	162	69	*14*	*7*	59
Oxfordshire	*15*	*38*	*66*	102	*71*	*14*	68	*31*	*16*	155	98	*33*	*42*	68
Peterborough, Soke of :	—	*162*	*296*	*167*	*117*	*26*	127	*87*	*68*	*357*	*130*	*42*	—	108
Rutland	—	—	*83*	*37*	*77*	—	*44*	—	*56*	*500*	*100*	—	—	*76*
Shropshire	*27*	*24*	*14*	73	*57*	*35*	44	*23*	*20*	*67*	55	*16*	—	33
Somerset	*11*	*46*	134	107	140	*44*	95	*9*	*54*	157	104	37	*11*	66
Southampton	*36*	*29*	103	116	92	*38*	81	*22*	*37*	124	105	31	*7*	61
Staffordshire	*47*	48	119	108	118	*58*	93	*43*	57	199	87	30	*17*	73
Suffolk, East	*25*	*51*	*50*	78	*56*	*22*	54	*37*	*39*	*59*	93	*25*	*6*	46
Suffolk, West	—	*12*	*48*	*67*	*81*	*29*	50	—	*53*	*141*	*88*	*19*	—	53
Surrey	39	39	185	151	124	74	114	*19*	39	175	103	37	*14*	68
Sussex, East	*56*	*80*	149	109	129	*87*	107	*16*	*20*	138	94	*22*	*8*	49
Sussex, West	*41*	*35*	198	124	115	*46*	99	*42*	*19*	129	89	*19*	*9*	48
Warwickshire	*28*	56	228	130	109	*72*	111	*50*	74	176	113	38	*11*	80
Westmorland	*30*	*23*	*60*	*108*	*52*	—	*54*	—	—	*195*	*87*	*11*	*16*	*50*
Wight, Isle of	—	*33*	*98*	*110*	*94*	*79*	79	*36*	*18*	*157*	*58*	*22*	*11*	45
Wiltshire	*15*	*12*	54	94	108	*56*	69	*12*	*41*	148	80	*38*	*29*	60
Worcestershire	*15*	*26*	138	89	104	*66*	80	*23*	*17*	130	86	*27*	*19*	57
Yorkshire, East Riding	*35*	*16*	*68*	*55*	105	*38*	60	—	*35*	*94*	73	*38*	*13*	47
Yorkshire, North Riding	*6*	*15*	*24*	75	70	*35*	46	*11*	*24*	145	75	*33*	*20*	54
Yorkshire, West Riding	40	50	118	112	127	79	97	45	57	161	87	31	*16*	66
Anglesey	*83*	*61*	*100*	*260*	*175*	*38*	143	*125*	*23*	*258*	*175*	*38*	—	89
Brecknockshire	—	*105*	*64*	*38*	*68*	*43*	*57*	*53*	*79*	*114*	*123*	*25*	—	71
Caernarvonshire	*105*	*179*	*176*	215	215	*80*	177	*143*	*136*	280	*77*	*36*	*19*	92
Cardiganshire	*83*	*29*	*179*	*99*	*36*	*57*	78	—	*24*	*333*	*53*	*37*	—	*58*
Carmarthenshire	*52*	*73*	255	137	*85*	*73*	117	*50*	*46*	327	115	*25*	*32*	92

Table LXII.—*continued.*

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
Administrative Counties—*contd.*														
Denbighshire	*89*	*104*	*112*	150	167	*100*	132	*59*	*26*	266	173	*30*	*17*	97
Flintshire	*45*	*72*	*100*	*73*	*105*	*85*	83	*33*	*69*	*174*	120	*45*	*12*	81
Glamorganshire	71	57	277	112	141	112	126	70	59	280	131	30	*22*	100
Merionethshire	*143*	*161*	*116*	*192*	*244*	*74*	165	*111*	*29*	*208*	*208*	*89*	*87*	123
Monmouthshire	*51*	*51*	189	139	109	*62*	108	*15*	*94*	303	143	54	*28*	109
Montgomeryshire	—	*40*	*179*	*140*	*49*	*43*	*84*	*43*	*63*	*219*	*48*	*53*	—	*65*
Pembrokeshire	—	*18*	*125*	*94*	*78*	—	68	—	—	*190*	*37*	*26*	*19*	45
Radnorshire	—	—	*53*	*107*	—	—	*36*	—	—	—	*74*	—	*91*	*33*
County Boroughs :														
Barnsley	*20*	*37*	*148*	*55*	*182*	*34*	87	*94*	*81*	*240*	*85*	*47*	—	90
Barrow-in-Furness	—	*43*	*222*	*87*	*105*	*33*	86	—	*56*	*190*	*60*	*26*	*86*	65
Bath	*26*	—	*30*	*108*	*150*	*24*	77	—	*18*	*173*	*73*	*42*	—	53
Birkenhead	*108*	*69*	*179*	201	238	*18*	161	*14*	*94*	448	162	*51*	*11*	136
Birmingham	75	75	192	141	179	84	135	62	73	221	117	33	*8*	90
Blackburn	*24*	*57*	*164*	*129*	156	*14*	109	—	*62*	*139*	*70*	*26*	*35*	54
Blackpool	*53*	*49*	*75*	129	135	*63*	102	*38*	*88*	*171*	*55*	*28*	*20*	54
Bolton	—	*35*	*34*	124	*87*	*123*	80	*16*	*61*	*51*	102	*41*	*17*	56
Bootle	*108*	*81*	*226*	289	348	*353*	240	*98*	*208*	387	239	*68*	—	196
Bournemouth	—	*34*	*233*	158	207	*114*	143	*103*	*11*	*90*	115	*33*	*41*	62
Bradford	*15*	*32*	186	142	123	*59*	107	*46*	*34*	237	111	*23*	*13*	73
Brighton	*18*	*133*	*239*	191	126	*67*	140	*20*	*132*	324	90	*56*	*29*	98
Bristol	*42*	*53*	214	144	147	*95*	126	*35*	64	275	138	*25*	*17*	92
Burnley	—	*91*	*182*	*47*	*139*	*105*	92	—	*21*	*137*	*164*	*36*	—	72
Burton upon Trent	—	*27*	*240*	*42*	*105*	—	*68*	—	*59*	*256*	*109*	—	—	*74*
Bury	—	*54*	*71*	*44*	*100*	*63*	*61*	—	—	*53*	*55*	*12*	—	*26*
Canterbury	*182*	*53*	*34*	*241*	*56*	—	*96*	—	*59*	*143*	*25*	—	—	*28*
Carlisle	*152*	*45*	*186*	*171*	*239*	*28*	154	—	*49*	*415*	*160*	*56*	—	115
Chester	—	*81*	*83*	*115*	*97*	*333*	114	—	*156*	*196*	*161*	*14*	*65*	103
Coventry	*25*	*65*	329	224	179	*161*	181	*26*	*50*	311	154	*58*	*18*	113
Croydon	—	*41*	169	123	158	*109*	113	*9*	*65*	187	90	*33*	*34*	69

Table LXII.—*continued.*

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
County Boroughs—*contd.*														
Darlington	*42*	*32*	*200*	*138*	211	*91*	131	*114*	*40*	*231*	*110*	*37*	*58*	96
Derby	*120*	*72*	*162*	113	135	*76*	115	*78*	*51*	180	*64*	*38*	—	69
Dewsbury	—	—	*156*	*95*	*109*	*32*	78	—	*23*	*77*	*25*	—	—	*18*
Doncaster	*132*	*43*	*153*	*103*	*154*	*54*	115	*24*	*42*	*250*	*127*	*28*	—	89
Dudley	*53*	*200*	*170*	*136*	*119*	*150*	141	*100*	*43*	*288*	*55*	*22*	*42*	84
Eastbourne	—	*27*	*143*	*53*	*69*	*27*	*50*	—	*97*	*250*	*106*	*13*	*14*	66
East Ham	*68*	*56*	*254*	*94*	*102*	*68*	105	*128*	*11*	*171*	*73*	*34*	—	64
Exeter	*91*	*170*	*471*	*140*	*128*	*269*	182	*36*	*45*	*208*	*108*	*33*	*17*	74
Gateshead	*80*	300	545	224	375	*70*	269	*151*	*141*	360	273	*23*	*20*	177
Gloucester	*100*	*67*	*188*	216	*157*	*143*	163	—	*143*	*378*	*196*	*71*	—	138
Great Yarmouth	*95*	—	*138*	*123*	*120*	*63*	93	—	*42*	*148*	*205*	—	—	77
Grimsby	*42*	*114*	407	*122*	*133*	*129*	152	*132*	*99*	299	*120*	*37*	*18*	112
Halifax	*25*	*115*	*164*	203	195	*98*	159	*44*	*32*	*81*	*90*	*39*	*13*	53
Hastings	*34*	*51*	*240*	*86*	*123*	—	86	*40*	—	*100*	*67*	*29*	*34*	44
Huddersfield	—	—	*54*	*96*	*60*	*71*	57	—	*13*	*122*	*95*	*31*	*22*	54
Ipswich	*63*	*51*	*190*	171	*157*	*75*	131	*73*	*62*	*183*	*84*	*50*	*29*	76
Kingston upon Hull	*17*	*51*	150	121	145	*49*	101	*36*	*41*	175	110	*34*	*7*	76
Leeds	*65*	*30*	131	130	124	94	106	*44*	*41*	178	88	*21*	*6*	61
Leicester	*48*	99	287	150	199	*140*	157	*51*	*112*	259	133	61	*21*	107
Lincoln	*91*	*120*	*77*	*47*	*128*	—	80	*80*	*100*	*216*	*139*	*12*	*23*	95
Liverpool	97	125	332	232	256	188	214	115	133	483	209	98	*32*	185
Manchester	69	76	194	135	173	97	133	66	84	213	84	*20*	*12*	75
Middlesbrough	*97*	*118*	277	197	199	*79*	171	*175*	*132*	419	219	*116*	*64*	189
Newcastle upon Tyne	*30*	100	271	166	192	*99*	157	*51*	*77*	417	130	53	*6*	123
Northampton	*28*	*14*	*222*	194	159	—	129	*59*	*45*	*260*	*90*	*13*	*13*	74
Norwich	*114*	*27*	*156*	121	*102*	*59*	101	*19*	*75*	*159*	*68*	*53*	—	62
Nottingham	*97*	129	257	165	200	*139*	168	*95*	*90*	287	187	79	*40*	141
Oldham	*128*	*60*	*226*	150	186	*55*	143	*191*	*68*	323	134	*22*	—	100
Oxford	*57*	*31*	*96*	*98*	*123*	*118*	93	—	*32*	*120*	*96*	*23*	*17*	60
Plymouth	—	*49*	205	163	162	*68*	129	*21*	*58*	328	96	*52*	*15*	91
Portsmouth	*64*	*35*	150	117	152	*127*	116	*20*	*72*	170	80	*32*	*19*	65

Table LXII.—*continued.*

Area	Males							Females						
	0–	5–	15–	25–	45–	65 and over	All ages	0–	5–	15–	25–	45–	65 and over	All ages
County Boroughs—*contd.*														
Preston	*38*	*110*	*77*	*96*	*134*	*35*	94	*119*	*101*	*260*	*70*	*6*	*32*	79
Reading	—	—	*273*	155	*116*	*163*	128	*19*	*25*	287	156	*32*	*14*	98
Rochdale	*139*	*122*	*159*	*119*	*133*	—	115	*121*	*95*	*183*	*87*	*52*	*18*	84
Rotherham	*33*	—	*70*	*82*	*137*	*49*	76	*28*	*48*	*123*	*93*	*27*	—	59
St. Helens	*18*	*62*	*118*	*99*	*143*	*98*	98	*20*	*71*	231	*79*	*34*	*26*	82
Salford	*82*	*76*	*121*	97	176	*133*	115	*50*	*98*	*124*	81	*47*	*30*	73
Sheffield	176	129	111	131	157	88	134	129	83	225	106	*23*	*18*	88
Smethwick	*368*	*255*	*200*	*136*	298	*154*	226	*138*	*250*	*250*	*76*	*82*	—	118
Southampton	*62*	*112*	*170*	144	230	*140*	153	*27*	*81*	153	132	*47*	*28*	89
Southend-on-Sea	*45*	*20*	*173*	139	139	*53*	107	*37*	*31*	*141*	*55*	*44*	*13*	49
Southport	*32*	—	*143*	*58*	*155*	*65*	88	*43*	*60*	*85*	*48*	*28*	*11*	41
South Shields	*109*	*203*	*210*	288	319	*94*	232	*111*	*243*	482	219	*75*	*56*	200
Stockport	—	*22*	253	*75*	*64*	*32*	75	*66*	*21*	*90*	*86*	*5*	*11*	44
Stoke on Trent	*76*	*75*	120	128	259	*144*	141	*115*	*38*	208	77	79	*22*	87
Sunderland	*74*	*54*	295	165	160	*60*	150	*114*	*124*	431	138	*47*	*19*	144
Tynemouth	*80*	*56*	*326*	*213*	301	*37*	189	*143*	*122*	*295*	*182*	*68*	*22*	139
Wakefield	*23*	*26*	*70*	*58*	*83*	—	*52*	—	—	*83*	*48*	*14*	*25*	*31*
Wallasey	*17*	*59*	*241*	*104*	*147*	*132*	114	*44*	*60*	391	120	*23*	*14*	104
Walsall	368	382	*264*	149	228	*54*	239	489	253	438	157	*41*	*42*	193
Warrington	*31*	*60*	*91*	*100*	*192*	*125*	105	—	*63*	*176*	*112*	*21*	*50*	82
West Bromwich	*182*	*72*	*176*	187	233	*118*	167	*176*	*197*	*220*	*96*	*43*	*23*	114
West Ham	*62*	*56*	*85*	91	115	*122*	91	—	*63*	*153*	101	*19*	*11*	65
West Hartlepool	—	*56*	*344*	*52*	*147*	—	89	*29*	*66*	*358*	*89*	*12*	—	93
Wigan	*30*	—	*148*	*109*	*50*	*51*	69	*27*	*63*	*255*	*71*	—	—	64
Wolverhampton	*61*	*60*	*204*	164	156	*50*	128	*78*	*96*	350	103	*20*	—	99
Worcester	*50*	*22*	*278*	*165*	*203*	*36*	144	—	*133*	*286*	*167*	*36*	*70*	122
York	—	*63*	*92*	*97*	*152*	*49*	93	*29*	—	*121*	*32*	*14*	—	37
Cardiff	*63*	*41*	*113*	192	217	*96*	144	*38*	*63*	244	140	*25*	*13*	92
Merthyr Tydfil	*95*	*22*	*150*	*165*	389	*83*	185	*33*	*54*	*326*	223	*71*	—	136
Newport	*78*	*203*	*224*	140	203	*91*	161	*64*	*92*	*266*	*98*	*54*	—	92
Swansea	*16*	—	*178*	126	139	*106*	109	*39*	*27*	204	95	*43*	*33*	75

Table LXIII.—Respiratory tuberculosis: distribution of administrative counties of England and of Wales according to the rate of notification (per 100,000 living, by sex).

England.—Males

115+		100+		80+		70+		60+		40+	
Bedfordshire	135	Cambridgeshire	104	Buckinghamshire	80	Berkshire	75	Cheshire	69	Devon	54
Cumberland	129	Cornwall	100	Gloucestershire	96	Derbyshire	79	Dorset	63	Rutlandshire	44
Kent	116	Durham	109	Hertfordshire	98	Ely, Isle of	70	Leicestershire	67	Shropshire	44
London	174	Essex	104	Lancashire	95	Herefordshire	79	Norfolk	69	Suffolk East	54
Middlesex	118	Northumberland	110	Somerset	95	Huntingdonshire	73	Northamptonshire	63	Suffolk West	50
Peterborough, Soke of :	127	Surrey	114	Southampton	81	Lincs., Holland	70	Oxfordshire	68	Westmorland	54
		Sussex East	107	Staffordshire	93	Lincs., Kesteven	70	Wiltshire	69	Yorks., North Riding	46
		Warwickshire	111	Sussex West	99	Lincs., Lindsey	70	Yorks., East Riding	60		
				Worcestershire	80	Nottinghamshire	79				
				Yorks., West Riding	97	Isle of Wight	79				

England.—Females

100+		80+		70+		60+		50+		30+	
Bedfordshire	109	Durham	94	Buckinghamshire	71	Cambridgeshire	61	Berkshire	59	Devon	38
Cumberland	109	Kent	82	Herefordshire	77	Cornwall	61	Derbyshire	59	Shropshire	33
London	112	Northumberland	96	Middlesex	79	Essex	65	Dorset	59	Cheshire	41
Peterborough, Soke of :	108	Warwickshire	80	Rutlandshire	76	Gloucestershire	65	Ely, Isle of	58	Lincs., Holland	45
				Staffordshire	73	Hertfordshire	66	Norfolk	58	Lincs., Lindsey	46
						Huntingdonshire	62	Nottinghamshire	59	Northamptonshire	41
						Lancashire	64	Suffolk West	53	Suffolk East	46
						Leicestershire	66	Westmorland	50	Sussex East	49
						Lincs., Kesteven	64	Worcestershire	57	Sussex West	48
						Oxfordshire	68	Yorks., North Riding	54	Isle of Wight	45
						Somerset	66			Yorks., East Riding	47
						Southampton	61				
						Surrey	68				
						Wiltshire	60				
						Yorks., West Riding	66				

Table LXIII.—*continued.*

Wales.—Males

120+	100+	80+	60+	50+	30+
Anglesey 143	Carmarthenshire 117	Flintshire ... 83	Cardiganshire ... 78	Brecknockshire ... 57	Radnorshire ... 36
Caernarvonshire ... 177	Monmouthshire 108	Montgomeryshire 84	Pembrokeshire ... 68		
Denbighshire ... 132					
Glamorganshire ... 126					
Merionethshire ... 165					

Wales.—Females

120+	100+	80+	60+	50+	30+
Merionethshire ... 123	Glamorganshire 100	Anglesey ... 89	Brecknockshire ... 71	Cardiganshire ... 58	Pembrokeshire ... 45
	Monmouthshire 109	Caernarvonshire 92	Montgomeryshire 65		Radnorshire ... 33
		Carmarthenshire 92			
		Denbighshire ... 97			
		Flintshire ... 81			

Table LXIV.—Respiratory tuberculosis: Notification and death rates per 100,000 living by sex in each County Borough and certain Administrative Counties of England, 1952.

	Notification rate		Death rate	
	Males	Females	Males	Females
Berkshire				
Reading	128	98	28	8
Admin. County	75	59	21	9
Cheshire				
Birkenhead	161	136	37	11
Chester	114	103	18	4
Stockport	75	44	42	9
Wallasey	114	104	28	9
Admin. County	69	41	24	7
Cumberland				
Carlisle	154	115	24	17
Admin. County	129	109	27	13
Derbyshire				
Derby	115	69	25	8
Admin. County	79	59	23	9
Devon				
Exeter	182	74	42	12
Plymouth	129	91	26	23
Admin. County	54	38	26	10
Durham				
Darlington	131	96	15	9
Gateshead	269	177	56	22
South Shields	232	200	86	33
Sunderland	150	144	49	20
West Hartlepool	89	93	49	13
Admin. County	109	94	27	19
Essex				
East Ham.	105	64	33	11
Southend-on-Sea	107	49	19	6
West Ham	91	65	35	12
Admin. County	104	65	21	11
Gloucestershire				
Bristol	126	92	30	13
Gloucester	163	138	37	14
Admin. County	96	65	27	8
Kent				
Canterbury	96	28	30	7
Admin. County	116	82	30	11
Lancashire				
Barrow	86	65	21	18
Blackburn	109	54	48	5
Blackpool	102	54	41	14
Bolton	80	56	38	14
Bootle	240	196	52	34
Burnley	92	72	40	16
Bury	61	26	39	13
Liverpool	214	185	44	25
Manchester	133	75	59	20
Oldham	143	100	45	14
Preston	94	79	42	3
Rochdale	115	84	42	18
St. Helens	98	82	48	20
Salford	115	73	44	26
Southport	88	41	31	2
Warrington	105	82	28	7
Wigan	69	64	14	9
Admin. County	95	64	29	12
Leicestershire				
Leicester	157	107	38	27
Admin. County	67	66	26	15
Lincs. Lindsey				
Grimsby	132	112	28	31
Lincoln	80	95	46	9
Admin. County	70	46	21	11
Norfolk				
Great Yarmouth	93	77	34	18
Norwich	101	62	44	12
Admin. County	69	58	8	10
Northamptonshire				
Northampton	129	74	38	14
Admin. County	63	41	33	11
Northumberland				
Newcastle upon Tyne	157	123	44	23
Tynemouth	189	139	43	27
Admin. County	110	96	28	8
Nottinghamshire				
Nottingham	168	141	45	21
Admin. County	79	59	23	15
Oxfordshire				
Oxford	93	60	18	6
Admin. County	68	68	10	5
Somerset				
Bath	77	53	24	15
Admin. County	95	66	29	13
Southampton				
Bournemouth	143	62	31	16
Portsmouth	116	65	35	9
Southampton	153	89	59	19
Admin. County	81	61	18	7
Staffordshire				
Burton upon Trent	68	74	30	8
Smethwick	226	118	42	15
Stoke on Trent	141	87	51	25
Walsall	239	193	53	19
West Bromwich	167	114	43	18
Wolverhampton	128	99	36	7
Admin. County	93	73	27	17
Suffolk East				
Ipswich	131	76	30	11
Admin. County	54	46	23	10
Surrey				
Croydon	113	69	34	12
Admin. County	114	68	26	9
Sussex East				
Brighton	140	98	30	8
Eastbourne	50	66	34	3
Hastings	86	44	34	5
Admin. County	107	49	22	8
Warwickshire				
Birmingham	135	90	37	13
Coventry	181	113	23	17
Admin. County	111	80	19	9
Worcestershire				
Dudley	141	84	48	9
Worcester	144	122	36	25
Admin. County	80	57	27	12
Yorks. East Riding				
Kingston upon Hull	101	76	40	19
Admin. County	60	47	26	10
Yorks. North Riding				
Middlesbrough	171	189	37	17
Admin. County	46	54	19	13
Yorks. West Riding				
Barnsley	87	90	48	13
Bradford	107	73	32	16
Dewsbury	78	18	24	21
Doncaster	115	89	40	10
Halifax	159	53	30	7
Huddersfield	57	54	21	6
Leeds	106	61	36	12
Rotherham	76	59	33	9
Sheffield	134	88	35	12
Wakefield	52	31	16	14
York	93	37	28	2
Admin. County	97	66	22	11

Table LXV.—Respiratory tuberculosis: Death rates per million living by sex and age and notifications per 100 deaths in Regions, Population Density Aggregates within Regional Groups, County Boroughs and Administrative Counties, 1952

Area	Males							Females							Persons	Notifications per hundred Deaths
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages	All Ages	
ENGLAND AND WALES	**15**	**7**	**69**	**244**	**637**	**720**	**304**	**18**	**6**	**116**	**197**	**139**	**153**	**128**	**212**	**449**
Conurbations	*16*	*4*	70	246	780	961	358	*15*	*5*	117	226	149	171	142	244	
Urban areas with populations of 100,000 and over	*19*	*7*	119	307	748	894	372	*4*	*5*	164	214	175	186	150	256	
Urban areas with populations of 50,000 and under 100,000	—	*17*	*91*	249	619	662	296	*15*	*5*	119	160	148	157	120	204	
Urban areas with populations under 50,000	*12*	*14*	67	232	580	603	278	*31*	*11*	100	180	118	135	115	193	
Rural areas	*14*	*3*	38	200	408	435	199	*14*	*2*	85	145	122	140	100	150	
NORTH OF ENGLAND																
Northern	*13*	*4*	113	284	765	613	325	*7*	*5*	164	296	164	163	166	245	474
East and West Riding	*6*	*21*	*64*	221	589	701	286	—	—	113	192	116	160	118	198	419
North Western	*21*	*2*	79	312	772	792	364	*22*	—	139	234	142	144	140	246	393
Sub-total: Northern, East and West Riding, North Western	*15*	*8*	83	278	715	723	331	*12*	*1*	137	235	139	153	139	231	
Tyneside conurbation	*25*	—	*158*	418	1,086	907	487	*28*	—	*200*	418	234	*159*	225	352	
West Yorkshire conurbation	*14*	*19*	*44*	205	518	611	264	—	—	*57*	210	122	*130*	116	185	
South East Lancashire conurbation	*37*	*6*	*78*	318	873	967	415	*30*	—	133	253	162	179	157	279	
Merseyside conurbation	—	—	*99*	376	965	975	401	*14*	—	*184*	404	207	*181*	208	299	
Total conurbations	*20*	*7*	86	314	818	859	382	*18*	—	136	296	168	162	166	268	
Urban areas with populations of 100,000 and over	*13*	*8*	*113*	325	842	833	394	—	—	*137*	204	130	231	136	259	
Urban areas with populations of 50,000 and under 100,000	—	*26*	*120*	221	601	744	295	*22*	—	*147*	154	*133*	*119*	113	201	
Urban areas with populations under 50,000	—	*5*	*85*	252	594	566	280	*8*	*5*	156	195	101	125	117	195	
Rural Areas	*28*	*8*	*39*	183	464	410	200	—	—	*106*	152	97	*108*	94	147	
MIDLANDS AND EASTERN																
North Midland	*13*	*4*	*85*	253	591	595	280	*27*	*9*	138	228	166	124	142	210	400
Midland	*25*	*3*	69	256	710	793	311	*31*	*12*	162	186	165	179	139	223	452
Eastern	—	*5*	*30*	174	352	553	194	—	*14*	*79*	108	155	156	102	147	528
Sub-total: North Midland, Midland, Eastern	*14*	*4*	62	233	569	652	268	*22*	*12*	132	177	162	155	129	197	
West Midlands conurbation	*39*	—	*102*	283	945	903	381	*30*	*18*	207	205	176	*166*	152	263	
Urban areas with populations of 100,000 and over	*21*	*14*	*45*	282	682	1,077	349	*12*	*8*	240	209	208	173	167	254	
Urban areas with populations of 50,000 and under 100,000	—	—	*123*	247	589	463	265	*23*	*14*	*104*	205	185	*163*	141	202	
Urban areas with populations under 50,000	*9*	*5*	*70*	220	492	606	249	*27*	*22*	*65*	158	137	156	111	178	
Rural areas	—	—	*25*	166	292	378	154	*16*	—	*70*	137	136	131	97	126	

Table LXV.—*continued.*

Area	Males							Females							Persons	Notifications per hundred Deaths
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages	All Ages	
GREATER LONDON	*9*	*6*	49	199	676	899	319	*16*	*6*	75	171	118	166	114	209	512
SOUTH OF ENGLAND																
Remainder of South Eastern	*19*	*12*	*54*	247	563	505	272	*41*	*6*	*67*	127	89	135	90	174	
Southern	—	*11*	*53*	217	508	603	245	—	*6*	*39*	127	128	129	90	166	470
South Western	*33*	*14*	*52*	229	557	567	270	*17*	—	141	170	139	194	129	197	409
Sub-total: Remainder of South Eastern, Southern, South Western	*18*	*13*	53	230	543	558	262	*19*	*4*	82	143	119	155	104	180	
Urban areas with populations of 100,000 and over	*33*	—	*152*	274	689	640	335	—	*10*	*113*	193	172	*180*	138	231	
Urban areas with populations of 50,000 and under 100,000	—	*28*	*33*	281	621	772	323	—	—	*99*	*95*	*127*	*164*	97	200	
Urban areas with populations under 50,000	*17*	*22*	*35*	198	564	541	260	*28*	*5*	*69*	148	84	138	95	172	
Rural areas	*17*	*5*	*33*	218	412	458	207	*26*	—	*72*	129	124	156	99	153	
WALES	*26*	*16*	135	325	776	816	386	*47*	*11*	132	274	180	137	162	272	*393*
Urban areas with populations of 100,000 and over	—	—	*278*	416	826	1,161	464	—	—	*116*	305	*208*	*113*	170	311	
Urban areas with populations of 50,000 and under 100,000	—	—	—	*235*	*1,389*	—	*418*	—	—	*233*	*638*	*238*	*556*	*340*	376	
Urban areas with populations under 50,000	*41*	*35*	*92*	289	782	846	378	*111*	*13*	*126*	273	203	*102*	169	272	
Rural areas	*31*	—	*103*	311	686	604	337	—	*18*	*145*	217	*118*	*176*	*132*	235	
County Boroughs																
Barnsley	—	*185*	*164*	*183*	*1,039*	*2,069*	*475*	—	—	*400*	*256*	—	—	*133*	304	291
Barrow-in-Furness	—	—	—	*194*	*465*	*333*	*208*	*323*	—	*238*	—	*390*	*286*	*177*	*193*	392
Bath	—	—	—	*392*	*250*	*476*	*237*	—	—	—	*161*	*339*	*132*	*154*	*189*	333
Birkenhead	—	—	—	*478*	*748*	*702*	366	—	—	*286*	*196*	—	*115*	*108*	232	639
Birmingham	*21*	—	*146*	215	966	935	374	*38*	—	*116*	159	202	*167*	131	248	450
Blackburn	—	—	*364*	*432*	*748*	*725*	476	—	—	—	*127*	—	*118*	*49*	243	326
Blackpool	—	—	*149*	*409*	*550*	*875*	408	—	—	*244*	*137*	*162*	*196*	*144*	258	289
Bolton	—	—	—	*487*	*642*	*685*	381	—	—	*85*	*366*	*83*	—	*136*	251	269
Bootle	—	—	*189*	*547*	*1,515*	*588*	*523*	—	—	*323*	*684*	*405*	—	*336*	427	509
Bournemouth	—	—	*167*	*234*	*543*	*633*	313	—	—	—	*335*	*165*	*136*	*161*	228	427
Bradford	—	*54*	*71*	*139*	706	*924*	315	—	—	*108*	*302*	*186*	*84*	157	229	387
Brighton	—	—	*141*	*426*	*556*	*111*	303	—	—	—	*90*	*75*	*219*	*80*	179	650
Bristol	*53*	—	*148*	*262*	600	*503*	295	—	—	*143*	*138*	*169*	*201*	125	206	527
Burnley	—	—	*227*	*236*	*594*	*1,579*	*396*	—	—	*196*	*172*	*217*	*182*	*157*	271	300
Burton upon Trent	—	—	—	*278*	*526*	*870*	*297*	—	—	—	*156*	—	*313*	*78*	*183*	389

Table LXV.—*continued.*

Area	Males							Females							Persons	Notifications per hundred Deaths
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages	All Ages	
County Boroughs—*contd.*																
Bury	—	—	357	111	571	1,563	394	—	—	—	110	235	222	129	255	167
Canterbury	909	—	—	—	833	—	296	—	—	—	250	—	—	70	180	340
Carlisle	—	—	—	95	845	278	241	—	—	488	100	225	213	173	206	650
Chester	—	—	—	164	323	476	182	—	—	—	—	135	—	38	104	1,040
Coventry	—	59	—	155	552	575	230	—	45	60	240	206	367	167	198	741
Croydon	—	—	—	126	634	1,395	342	—	—	—	175	148	172	116	224	400
Darlington	—	—	—	163	211	606	146	—	—	—	79	185	192	92	118	960
Derby	—	—	—	296	311	758	251	—	—	—	98	217	—	82	163	561
Dewsbury	556	278	313	270	156	—	235	—	—	—	380	267	270	214	224	208
Doncaster	—	217	169	513	577	541	399	—	—	156	169	93	—	96	244	415
Dudley	—	—	—	291	746	300	481	—	—	192	220	—	—	90	272	406
Eastbourne	—	—	—	395	690	541	344	—	—	—	—	—	141	32	173	340
East Ham	—	—	—	99	787	1,186	333	—	—	—	97	274	154	110	215	388
Exeter	—	—	—	165	465	308	417	—	—	—	167	83	339	119	252	484
Gateshead	—	—	303	588	1,417	526	563	—	—	225	407	227	196	223	391	569
Gloucester	—	—	—	98	964	1,071	368	—	—	222	326	—	238	144	253	594
Great Yarmouth	—	—	345	411	400	1,250	338	—	—	—	137	282	541	182	254	331
Grimsby	—	—	—	229	619	968	282	—	123	299	376	556	175	310	296	443
Halifax	—	—	164	150	619	732	295	—	—	161	138	—	132	74	173	582
Hastings	—	—	—	571	462	488	335	—	—	—	111	—	112	52	168	364
Huddersfield	—	—	—	160	179	1,250	207	—	—	—	56	105	109	61	132	424
Ipswich	—	—	—	357	261	1,321	301	—	—	500	56	165	—	109	200	510
Kingston upon Hull	—	46	—	327	1,093	656	399	—	—	132	287	255	352	192	291	301
Leeds	—	—	—	355	717	704	360	—	—	61	180	152	147	118	230	356
Leicester	—	49	133	323	945	496	382	—	—	448	435	280	103	268	323	405
Lincoln	—	—	192	660	698	625	460	—	—	—	99	118	227	87	274	321
Liverpool	—	—	134	398	1,036	1,218	435	24	—	198	485	287	182	251	337	590
Manchester	87	—	124	406	1,427	1,362	590	33	—	146	325	223	215	198	383	567
Middlesbrough	—	—	—	359	113	476	372	—	—	215	365	68	128	167	272	663
Newcastle upon Tyne	—	—	60	355	843	1,351	435	—	—	142	448	251	127	227	326	527
Northampton	—	—	185	216	714	1,042	380	—	—	—	181	133	375	140	249	396
Norwich	—	—	130	347	866	1,029	443	—	—	122	227	59	198	123	272	294
Nottingham	61	—	55	283	951	1,826	445	68	—	324	283	272	114	213	324	476
Oldham	—	—	—	535	1,000	364	452	—	—	—	321	169	—	141	289	417
Oxford	—	156	137	76	439	—	177	—	—	109	64	77	—	56	111	673
Plymouth	100	—	199	192	511	568	263	—	—	400	240	390	147	226	244	451
Portsmouth	—	—	100	292	661	1,078	348	—	—	71	149	143	62	93	218	412
Preston	189	—	—	558	775	351	419	—	—	—	58	60	—	34	227	381
Reading	—	—	152	221	435	930	278	—	—	—	250	64	—	83	175	640
Rochdale	—	—	—	593	796	208	424	—	—	333	159	148	357	177	296	335
Rotherham	—	—	175	164	526	1,220	328	—	—	—	85	182	233	94	207	324
St. Helens	—	—	353	395	1,032	976	480	—	—	220	197	342	263	196	335	268
Salford	118	69	—	410	802	1,500	435	125	—	248	459	282	101	258	343	272
Sheffield	—	—	65	230	701	958	345	—	—	169	185	85	213	122	228	481
Smethwick	—	—	—	273	1,071	1,154	419	—	—	192	254	—	377	148	275	614

Table LXV.—*continued.*

Area	Males							Females							Persons	Notifications per hundred Deaths
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages	All Ages	
County Boroughs—*contd.*																
Southampton	—	—	*200*	*325*	1,694	*930*	587	—	*81*	*67*	*264*	*189*	*472*	*193*	381	313
Southend-on-Sea	—	—	—	*149*	*316*	*667*	*192*	—	—	—	*43*	*88*	*132*	*59*	*119*	628
Southport	—	—	—	*291*	*619*	*435*	*313*	—	—	—	*81*	—	—	*20*	*143*	425
South Shields	*182*	—	*247*	*479*	2,389	*1,509*	862	*278*	—	*361*	*530*	*411*	—	*331*	591	365
Stockport	—	—	—	*299*	*809*	*1,290*	417	—	—	—	*239*	*93*	—	*94*	247	237
Stoke on Trent	*64*	—	—	450	979	1,892	508	—	—	*520*	*210*	*334*	*373*	248	378	302
Sunderland	—	—	*274*	*348*	1,082	*1,343*	485	—	—	*139*	*308*	*186*	*472*	*200*	336	438
Tynemouth	—	—	*233*	*449*	*822*	*1,111*	*427*	—	—	—	*707*	—	*444*	*267*	346	474
Wakefield	—	—	—	—	*417*	*714*	*161*	—	—	—	*357*	—	*250*	*136*	*149*	278
Wallasey	—	—	—	*148*	*642*	*1,053*	*281*	—	—	—	*60*	—	*556*	*91*	*178*	611
Walsall	*351*	—	*139*	*400*	*1,260*	*1,081*	526	—	—	*411*	*393*	*68*	—	*191*	358	602
Warrington	—	—	*364*	*273*	*385*	*938*	*282*	—	—	—	*172*	*104*	—	*72*	*173*	536
West Bromwich	—	—	—	*360*	*1,279*	*882*	*429*	—	—	*169*	*274*	*215*	*227*	*183*	307	459
West Ham	—	—	*94*	*279*	*656*	*1,081*	346	*145*	—	—	*194*	*140*	*106*	*115*	228	341
West Hartlepool	—	—	*625*	*346*	*1,467*	—	*487*	—	—	*189*	*357*	—	—	*133*	303	300
Wigan	—	—	—	*168*	*198*	*513*	*143*	—	—	*182*	*236*	—	—	*94*	*118*	560
Wolverhampton	—	—	*108*	*369*	*809*	*833*	362	*156*	—	*97*	*40*	*152*	—	*73*	215	529
Worcester	—	—	*278*	*380*	*870*	—	*361*	*417*	—	—	*444*	*357*	—	*250*	*302*	439
York	—	—	—	*129*	*640*	*976*	*276*	—	—	—	—	—	*208*	*18*	*142*	447
Cardiff	—	—	*150*	*424*	1,086	*1,058*	493	—	—	*60*	*370*	*156*	*200*	180	328	355
Merthyr Tydfil	—	—	—	*235*	*1,389*	—	*418*	—	—	*233*	*638*	*238*	*556*	*340*	376	422
Newport (Mon.)	—	—	*172*	*318*	*488*	*682*	*294*	—	—	—	*305*	*231*	—	*147*	218	574
Swansea	—	—	*561*	*462*	*743*	*1,061*	499	—	—	*278*	*86*	*303*	—	*145*	317	288
Administrative Counties																
Bedfordshire	—	—	—	*137*	*317*	*840*	184	—	—	*49*	*153*	*132*	*152*	*103*	144	847
Berkshire	—	—	—	*72*	637	*519*	209	—	—	—	*48*	*111*	*374*	*89*	149	449
Buckinghamshire	—	—	*35*	*224*	*261*	*575*	185	—	—	*72*	*70*	*127*	*123*	76	130	*584*
Cambridgeshire	—	—	—	*247*	*707*	*652*	309	—	—	—	*127*	*96*	*74*	*70*	186	439
Cheshire	—	—	*21*	*113*	649	560	244	—	—	*21*	*87*	*61*	*158*	65	150	362
Cornwall	—	—	*41*	*330*	*497*	*448*	265	—	—	*238*	*309*	*170*	*171*	184	223	357
Cumberland	*96*	*53*	*65*	*274*	*596*	*430*	267	—	—	*125*	*291*	*39*	*164*	*129*	198	602
Derbyshire	—	—	*77*	215	499	*415*	232	—	—	*93*	*163*	*74*	*132*	92	161	427
Devon	—	—	—	328	483	*371*	260	—	—	*75*	*158*	*38*	*233*	100	175	261
Dorset	—	*55*	*42*	*387*	*428*	*710*	299	—	—	—	*121*	*184*	*122*	*100*	196	311
Durham	—	—	*83*	212	698	469	273	—	—	*240*	314	211	*113*	186	229	443
Ely, Isle of	—	—	—	*214*	*612*	*222*	*227*	—	*179*	*152*	—	*99*	*204*	*89*	*157*	407
Essex	—	*9*	*33*	163	463	544	212	*14*	*18*	*48*	164	139	*109*	105	156	534
Gloucestershire	*53*	—	—	*266*	614	*488*	267	*61*	—	*85*	*130*	*113*	*31*	*82*	172	465
Herefordshire	—	—	*122*	*238*	*124*	*781*	*194*	—	—	—	*180*	*121*	—	*77*	*134*	582
Hertfordshire	—	—	*57*	*184*	*268*	*558*	179	—	—	*122*	*117*	*137*	*185*	106	141	576
Huntingdonshire	—	—	—	—	*455*	—	*108*	—	—	—	—	*253*	–	*62*	*87*	783
Kent	—	*20*	*55*	245	700	560	304	*15*	*19*	*117*	164	*94*	*163*	110	201	487
Lancashire	*12*	—	*49*	258	608	603	294	*24*	—	*155*	182	113	*131*	119	202	388
Leicestershire	—	—	44	*326*	562	*183*	261	*142*	—	—	*214*	*247*	*105*	146	202	329

Table LXV.—*continued.*

Area	Males							Females							Persons	Notifications per hundred Deaths
	0–	5–	15–	25–	45–	65 and over	All Ages	0–	5–	15–	25–	45–	65 and over	All Ages	All Ages	
Administrative Counties—*contd.*																
Lincolnshire (Parts of Holland)	—	—	—	267	259	465	180	—	—	—	72	172	156	78	128	446
Lincolnshire (Parts of Kesteven)	—	—	—	273	672	156	227	—	—	274	144	219	—	122	175	383
Lincolnshire (Parts of Lindsey)	—	—	43	164	475	610	211	—	50	91	159	90	159	105	158	367
London	—	—	54	238	961	1,505	440	—	—	99	181	164	224	139	279	505
Middlesex	12	7	60	163	470	662	237	—	—	93	188	91	160	111	170	572
Norfolk	—	—	—	110	102	300	84	—	—	41	79	183	254	102	93	683
Northamptonshire	90	—	76	350	614	544	332	—	—	—	250	57	178	106	216	240
Northumberland	—	—	222	309	425	594	277	—	—	71	123	55	151	76	175	588
Nottinghamshire	—	—	191	170	463	599	230	44	—	177	295	111	70	148	189	364
Oxfordshire	—	—	60	176	51	282	101	—	—	78	78	48	—	45	73	923
Peterborough, Soke of :	—	—	—	208	779	263	286	—	—	—	—	—	—	—	141	833
Rutland	—	—	—	—	385	—	88	—	—	—	333	—	—	109	98	600
Shropshire	—	—	—	302	272	435	175	76	—	52	75	126	118	78	128	303
Somerset	—	61	35	140	673	595	286	—	—	102	180	170	184	133	206	388
Southampton	—	—	17	197	421	376	179	—	—	24	96	129	65	68	123	577
Staffordshire	26	—	48	286	624	484	269	—	29	317	255	135	194	171	220	379
Suffolk, East	—	64	71	178	359	588	229	—	—	—	34	281	112	98	161	309
Suffolk, West	—	—	—	112	294	735	178	—	—	—	68	123	449	119	149	344
Surrey	37	—	27	154	566	606	255	56	23	34	148	83	142	94	168	533
Sussex, East	—	—	—	207	315	612	216	79	—	46	110	112	54	79	139	536
Sussex, West	—	—	58	181	562	464	253	—	—	50	168	126	63	93	166	430
Warwickshire	—	—	35	143	375	670	191	—	—	35	146	100	180	92	141	675
Westmorland	—	—	—	541	—	263	159	—	—	—	109	106	161	84	119	438
Wight, Isle of	—	—	—	—	377	952	225	—	—	—	195	75	—	78	146	414
Wiltshire	73	39	43	102	468	787	213	59	—	135	57	95	370	108	163	397
Worcestershire	—	—	81	259	680	438	272	58	35	70	111	189	190	117	192	353
Yorkshire, East Riding	—	—	57	346	480	377	256	—	—	157	166	102	63	100	175	305
Yorkshire, North Riding	—	—	24	169	558	213	185	—	41	44	232	155	149	131	159	313
Yorkshire, West Riding	—	9	71	168	454	531	218	—	—	116	180	97	158	108	161	504
Anglesey	—	—	—	800	635	1,538	536	—	—	—	—	127	200	71	277	407
Brecknockshire	—	263	213	128	411	—	212	—	—	—	137	127	—	71	142	450
Caernarvonshire	—	—	—	296	1,329	1,467	624	286	—	122	296	104	—	136	363	362
Cardiganshire	—	—	—	110	909	286	275	—	—	417	132	123	488	180	225	300
Carmarthenshire	172	—	182	157	704	729	339	—	—	102	38	41	316	70	204	511
Denbighshire	—	—	93	121	343	500	178	147	—	92	221	130	86	127	152	750
Flintshire	—	—	—	780	814	339	442	164	—	217	191	225	235	179	310	264
Glamorganshire	32	35	141	343	792	882	404	—	19	161	384	198	54	192	296	382
Merionethshire	—	—	—	192	1,111	1,481	472	—	—	417	625	—	435	246	361	400
Monmouthshire	64	—	105	207	736	802	336	149	—	53	173	231	169	148	276	394
Montgomeryshire	—	—	—	—	164	435	93	—	—	—	323	351	—	163	130	567
Pembrokeshire	—	—	139	547	680	476	383	—	189	159	222	172	—	151	264	213
Radnorshire	—	—	—	—	345	909	182	—	—	—	370	—	909	222	200	175

Table LXVI.—Death rates per million living at ages 0-14 by sex from tuberculous meningitis and other non-respiratory tuberculosis in Standard Regions, County Boroughs and Administrative Counties, 1952

Area	Males		Females	
	Tuberculous meningitis	Other non-respiratory tuberculosis	Tuberculous meningitis	Other non-respiratory tuberculosis
England and Wales	**34**	**9**	**32**	**6**
Standard Regions :				
Northern	*47*	*13*	*36*	—
East and West Ridings	*36*	*11*	44	*9*
North Western	63	*14*	50	*16*
North Midland	17	*7*	*34*	*5*
Midland	50	*13*	46	*2*
Eastern	*14*	*3*	*12*	*6*
London and South Eastern	19	*5*	*16*	*4*
Southern	*36*	*13*	*17*	*7*
South Western	*21*	*6*	*34*	*3*
Wales	*30*	*7*	*38*	*3*
County Boroughs				
Barnsley	—	—	*106*	—
Barrow-in-Furness	—	—	*235*	—
Bath	—	—	—	—
Birkenhead	*57*	—	*160*	*53*
Birmingham	*38*	*15*	*30*	*8*
Blackburn	—	*106*	—	*99*
Blackpool	—	—	—	—
Bolton	—	—	*62*	*62*
Bootle	—	—	*354*	*88*
Bournemouth	—	—	—	—
Bradford	*32*	*32*	*98*	*33*
Brighton	—	—	—	*71*
Bristol	*20*	—	*20*	—
Burnley	—	—	*116*	—
Burton upon Trent	—	—	—	—
Bury	*169*	—	—	—
Canterbury	—	—	—	—
Carlisle	—	—	—	—
Chester	*192*	—	—	—
Coventry	*69*	—	*119*	—
Croydon	—	—	—	—
Darlington	—	—	—	—
Derby	—	—	—	—
Dewsbury	—	—	—	—
Doncaster	—	—	—	—
Dudley	—	—	—	—
Eastbourne	—	—	—	—
East Ham	*86*	—	—	—

Area	Males		Females	
	Tuberculous meningitis	Other non-respiratory tuberculosis	Tuberculous meningitis	Other non-respiratory tuberculosis
County Boroughs—*contd.*				
Exeter	—	—	—	—
Gateshead	*65*	—	*145*	—
Gloucester	—	—	—	—
Great Yarmouth	—	—	—	—
Grimsby	—	—	*84*	—
Halifax	*217*	—	—	—
Hastings	—	—	—	—
Huddersfield	—	—	*85*	—
Ipswich	—	—	—	—
Kingston upon Hull	*26*	—	*26*	—
Leeds	*38*	*19*	*36*	—
Leicester	*29*	—	—	—
Lincoln	—	—	—	—
Liverpool	*114*	*28*	*29*	*10*
Manchester	*61*	*12*	*39*	*13*
Middlesbrough	*45*	*45*	*109*	—
Newcastle upon Tyne	*30*	*30*	*61*	—
Northampton	—	—	—	—
Norwich	*84*	—	—	—
Nottingham	—	—	*29*	—
Oldham	*76*	—	—	*83*
Oxford	*101*	—	—	—
Plymouth	*41*	—	*42*	—
Portsmouth	*40*	*40*	*37*	—
Preston	—	—	—	—
Reading	—	—	—	*76*
Rochdale	—	—	*267*	—
Rotherham	*123*	—	—	—
St. Helens	—	—	*75*	—
Salford	—	—	—	—
Sheffield	*18*	—	—	*18*
Smethwick	—	—	—	—
Southampton	*97*	—	*51*	—
Southend-on-Sea	—	—	—	—
Southport	—	*156*	*137*	—
South Shields	—	*78*	—	—
Stockport	*256*	—	*129*	—
Stoke on Trent	—	*27*	—	—
Sunderland	*44*	—	—	—
Tynemouth	—	—	—	—

Table LXVI.—*continued.*

Area	Males		Females	
	Tuberculous meningitis	Other non-respiratory tuberculosis	Tuberculous meningitis	Other non-respiratory tuberculosis
County Boroughs—*contd.*				
Wakefield	—	—	—	—
Wallasey	—	—	—	—
Walsall	*63*	—	*78*	—
Warrington	*87*	—	*110*	—
West Bromwich	—	—	*105*	—
West Ham	*53*	—	*110*	—
West Hartlepool	*98*	—	—	—
Wigan	—	—	*235*	—
Wolverhampton	*43*	—	*56*	—
Worcester	*154*	—	—	—
York	—	—	*194*	—
Cardiff	—	*34*	—	—
Merthyr Tydfil	*303*	—	*149*	—
Newport (Mon.)	—	—	—	—
Swansea	—	—	—	—
Administrative Counties				
Bedfordshire	—	*27*	—	—
Berkshire	*31*	—	—	—
Buckinghamshire	*23*	—	—	—
Cambridgeshire	*54*	—	—	—
Cheshire	*54*	*11*	*12*	*12*
Cornwall	—	—	*30*	—
Cumberland	—	*34*	*83*	—
Derbyshire	—	—	*12*	—
Devon	*19*	*19*	*41*	—
Dorset	*33*	—	—	—
Durham	*63*	*9*	*38*	—
Ely, Isle of	—	—	—	—
Essex	—	—	*22*	—
Gloucestershire	*54*	—	*61*	—
Herefordshire	*69*	—	—	—
Hertfordshire	—	—	—	—
Huntingdonshire	—	—	—	—
Kent	*35*	*12*	*23*	*6*
Lancashire	*67*	*13*	*36*	*14*
Leicestershire	*83*	*55*	*79*	—
Lincolnshire (parts of Holland)	*76*	—	*83*	—
Lincolnshire (parts of Kesteven)	*63*	*63*	—	—
Lincolnshire (parts of Lindsey)	—	—	*29*	*29*

Area	Males		Females	
	Tuberculous meningitis	Other non-respiratory tuberculosis	Tuberculous meningitis	Other non-respiratory tuberculosis
Administrative Counties—*contd.*				
London	*21*	*6*	*22*	—
Middlesex	—	—	*4*	—
Norfolk	*46*	—	*23*	*23*
Northamptonshire	—	—	*36*	—
Northumberland	*39*	—	*20*	—
Nottinghamshire	*15*	—	*64*	*16*
Oxfordshire	*118*	*59*	*52*	—
Peterborough, Soke of	—	—	—	—
Rutland	—	—	—	—
Shropshire	*56*	—	*91*	—
Somerset	*20*	—	*40*	—
Southampton	*13*	*13*	*29*	*14*
Staffordshire	*96*	*19*	*65*	—
Suffolk, East	*42*	—	*42*	—
Suffolk, West	—	—	—	*90*
Surrey	*41*	*7*	*7*	—
Sussex, East	*29*	*29*	—	—
Sussex, West	—	—	*32*	*96*
Warwickshire	*33*	*16*	*35*	—
Westmorland	*132*	—	—	—
Wight, Isle of	*94*	*94*	—	—
Wiltshire	—	*26*	*23*	*23*
Worcestershire	*40*	*20*	*22*	—
Yorkshire, East Riding	*47*	—	*90*	*90*
Yorkshire, North Riding	*67*	—	—	—
Yorkshire, West Riding	*43*	*16*	*44*	—
Anglesey	—	—	*169*	—
Brecknockshire	*161*	—	*175*	—
Caernarvonshire	—	—	*86*	—
Cardiganshire	—	*217*	—	—
Carmarthenshire	*110*	—	*119*	—
Denbighshire	—	—	—	—
Flintshire	—	—	—	—
Glamorganshire	*34*	—	*35*	—
Merionethshire	—	—	—	—
Monmouthshire	—	—	*59*	—
Montgomeryshire	*217*	—	—	—
Pembrokeshire	—	—	—	*102*
Radnorshire	—	—	—	—

Table LXVII.—Tuberculosis of respiratory system: Deaths and Standardized Mortality Ratios* by Social Class for Men (Occupied or Retired) and Married Women aged 20-64 years, 1950

Social Class, Sub-Class or Socio-economic group	MEN (Occupied or Retired)			MARRIED WOMEN		
	Deaths registered	Deaths expected	S.M.R.	Deaths registered	Deaths expected	S.M.R.
I. PROFESSIONAL	155	244	64	38	88	*43*
II. INTERMEDIATE	727	1165	62	222	429	52
II(i) Farmers	73	158	46	24	52	*46*
III. SKILLED	3650	3530	103	1429	1377	104
IIIa. Mineworkers, all types	197	140	141	87	60	145
IIIa(i) Hewers and Getters (coal)	165	102	162	71	44	161
IIIb Transport workers	398	393	101	200	161	124
IIIc Clerical workers	410	297	138	97	106	92
IIId Armed Forces	185	87	213	49	17	*288*
IIIe Others in III	2460	2611	94	996	1037	96
IIIe(i) Foremen, and overlookers, in Metal, etc.	28	73	*38*	15	29	*52*
IV. PARTLY SKILLED	1078	1138	95	424	398	107
IVa Agricultural	139	239	58	65	75	87
IVb Others in IV	939	901	104	359	323	111
IVb(i) Mineworkers (coal)	159	167	95	63	58	109
V. UNSKILLED	1416	949	149	457	275	166
Va Building and dock labourers	258	257	100	116	79	141
Va(i) Building labourers	181	213	85	87	63	138
Va(ii) Dock labourers	77	45	171	24	14	*171*
Vb Others in V	1158	691	168	346	198	175

*Figures calculated on less than 50 deaths are in italics.

Table LXVIII.—Tuberculosis of respiratory system: Death rates* per 10,000 all causes, for Men (Occupied or Retired) and Married Women aged 20-64 and 65 and over, 1950

Social Class, Sub-class, or Socio-economic group	MEN (Occupied or Retired)				MARRIED WOMEN			
	20–64		65 and over		20–64		65 and over	
	Deaths	Per 10,000 all causes	Deaths	Per 10,000 all causes	Deaths	Per 10,000 all causes	Deaths	Per 10,000 all causes
I. PROFESSIONAL	155	549	45	*72*	38	292	7	(*46*)
II. INTERMEDIATE	727	573	164	58	222	365	35	*46*
II(i) Farmers	73	460	13	*22*	24	2497	10	*62*
III. SKILLED	3650	894	691	99	1429	736	77	39
IIIa Mineworkers, all types	197	886	86	131	87	774	5	(*29*)
IIIa(i) Hewers and getters (coal)	165	973	69	131	71	874	4	(*31*)
IIIb Transport workers	398	895	48	*93*	200	908	4	(*26*)
IIIc Clerical workers	410	979	52	116	97	635	10	*83*
IIId Armed Forces	185	2304	19	*145*	49	1713	3	(*128*)
IIIe Others in III	2460	843	486	92	996	698	55	37
IIIe(i) Foremen, and overlookers in Metal, etc.	28	473	9	(*115*)	15	489	—	—
IV PARTLY SKILLED	1078	821	227	86	424	646	27	*38*
IVa Agricultural	139	565	39	*41*	65	485	9	(*35*)
IVb Others in IV	939	881	188	112	359	688	18	*40*
IVb(i) Mineworkers (coal)	159	778	31	*98*	63	531	2	(*23*)
V. UNSKILLED	1416	934	313	133	457	738	30	*54*
Va Building and dock labourers	258	951	52	105	111	830	5	(*41*)
Va(i) Building labourers	181	851	26	*72*	87	837	3	(*31*)
Va(ii) Dock labourers	77	1312	26	*199*	24	805	2	(*78*)
Vb Others in V	1158	930	261	140	346	712	25	*57*

*Figures calculated on less than 50 deaths are in italics

*Figures calculated on less than 10 deaths are in brackets

SYPHILIS AND AORTIC ANEURYSM

The number of deaths ascribed to syphilis and its sequelæ in 1952 was 1,619, of which 1,097 were of males and 522 were of females. In accordance with the Sixth Revision of the International Classification, the principal conditions under this head, and their number of deaths in 1952, comprise:—

		M	F
020	Congenital syphilis	17	15
021	Early syphilis	1	2
022	Aneurysm of aorta (unless specified non-syphilitic)	435	222
023	Other cardiovascular syphilis	388	173
024	Tabes dorsalis	100	27
025	General paralysis of the insane	78	45
026	Other syphilis of central nervous system	50	21
027	Other forms of late syphilis	23	13
028	Latent syphilis	—	—
029	Syphilis, unqualified	5	4
020-029	**Total**	**1,097**	**522**

The effect of the change from Fifth to Sixth Revision of the classification is demonstrated in the table below which compares the numbers of deaths assigned to various categories in 1949 according to the two revisions:—

5th Revision			6th Revision		
	M	F		M	F
30 Syphilis	**1,413**	**642**	020-029 **Syphilis**	**1,290**	**491**
30a Tabes dorsalis	114	20	024 Tabes dorsalis	114	20
30b General paralysis of the insane	162	65	025 General paralysis of the insane	161	65
30c Aortic aneurysm	683	349	022 Aortic aneurysm	515	191
30d Other	454	208	Rem. 020-029 Other	500	215

The effect of change to the sixth revision was therefore to decrease the total number of deaths ascribed to syphilis by 9 per cent for males and by 24 per cent for females, much of the decrease being in the group aortic aneurysm. Prior to 1950 all deaths from aortic aneurysm, whether described as due to syphilis or not, were assigned to the group of syphilitic diseases. Since 1950, however, deaths from aortic aneurysm described as non-syphilitic have been assigned to a non-syphilitic rubric, namely No. 451 aortic aneurysm specified as non-syphilitic, and dissecting aneurysm. These "non-syphilitic" aortic aneurysms will be further discussed below.

Trend

Mortality attributed to syphilis has declined during the course of the past 50 years. Taking 1938 as unit base year the Comparative Mortality Index for 1901-05 was in the vicinity of 2·0, had declined to under 1·5 by 1920, to 1·2 by 1930, and to 0·9 by 1940. The subsequent trend is shown in Table LXIX., (page 140) the mortality index for each sex each year since 1948 being half or less than half what it was in 1938. The crude rates for the principal types of syphilitic disease indicate that there has been no decline in mortality from aortic aneurysm since 1940, a large reduction in mortality from tabes dorsalis and general paralysis of the insane, and approximately a halving in the combined mortality from other syphilitic disease.

Outstanding among these other forms of syphilitic disease has been the reduction in mortality from congenital syphilis (not distinguished in Table LXIX., page 140), deaths from which numbered 365 in 1932, 148 in 1942, and 32 in 1952.

Sex and Age Differences

At every age the death rate from syphilis is higher among males than females. In infancy there were 13 deaths of boys in 1952 compared with 8 deaths of girls. During childhood and adolescence very few deaths are recorded, but from 25 years of age the numbers increase with advancing age, reaching a maximum for males at 65-74 and for females at 75 and over. Death rates per million in 1950-52 (from Table LXX., page 141) are shown below:—

	All ages	Under 1	1-24	25-	45-	65-	75 & over
Male	56	42	0.8	10	110	290	261
Female	23	28	0·7	5	38	81	105

Urban-Rural Differences

Table LXX gives death rates per million in the aggregated conurbations, with Greater London separately distinguished, and in urban and rural districts.

In each sex the crude rates at all ages were highest in Greater London, due entirely to very heavy mortality at ages 65-74 and 75 and over. In contrast the mortality of infants in Greater London was low, while at intervening ages it approximated to the national average.

Outside Greater London rates in each sex tended to be a little lower in the conurbations than in other large urban areas, but the principal feature of the mortality distribution was the much lower mortality of males in the rural districts and of females in the smallest urban areas and in the rural districts. The reporting of syphilis on death certificates has always been regarded, for various reasons, as being somewhat incomplete, but little is known about geographical and other differences in the magnitude of the errors in the recorded figures. They are unlikely however to account for the very large differences in mortality recorded in Greater London and in the rural districts.

Aortic aneurysm, syphilitic and non-syphilitic

As explained above a distinction has been made since 1950 between deaths from aortic aneurysm, syphilitic or unqualified (No. 022) and aortic aneurysm described as non-syphilitic (No. 451). In 1949 when tabulation was carried out both by the 5th and the 6th Revision of the International Classification the numbers of deaths assigned to the relevant rubrics were:—

		M	F
	5th Revision		
30c	Aortic aneurysm	**683**	**349**
	6th Revision		
022	Aortic aneurysm Syphilitic and unqualified	515	191
451	Aortic aneurysm Non-syphilitic or dissecting	173	189
Total (6th Revision)		**688**	**380**

A further change in classification was introduced in 1952 when, in accordance with W.H.O., "Supplementary Interpretations and Instructions for Coding Causes of Death"* the category No. 451 was extended to include "aortic aneurysm specified as arteriosclerotic or due to arteriosclerosis". Prior to 1952

*Manual of The International Statistical Classification of Diseases, Injuries, and Causes of Death ; Addendum 1, 1953 (Page 23)

deaths so described would have been assigned to arteriosclerosis. The effect of this modification in coding practice in 1952 has been approximately to double the deaths assigned to No. 451 (aortic aneurysm, non-syphilitic or dissecting), the numbers of which had in any case been increasing during the previous years.

The trend of mortality from aortic aneurysm as a whole since 1931 is shown in Table LXXI., (page 142), the numbers of deaths since 1949 that were respectively assigned to No. 022 (syphilitic and unqualified) or to No. 451 being:—

	022		451		Total	
	M	F	M	F	M	F
1949	515	191	173	189	688	380
1950	430	225	212	204	642	429
1951	475	204	234	231	709	435
1952	435	222	550	456	985	678

A detailed analysis of all the 1,663 deaths from aortic aneurysm in 1952 by site of aneurysm and by cause is given in Table LXXII., (page 143), and summarised below:—

	Total		Syphilitic (022 pt.)		Not Syphilitic (451)		Cause not stated (022 pt.)	
	M	F	M	F	M	F	M	F
Abdominal	209	98	6	1	112	57	91	40
Thoracic	155	133	16	9	78	93	61	31
Other or not stated	621	447	69	20	360	306	192	121
TOTAL	985	678	91	30	550	456	344	192

Out of a total of 307 aneurysms of the abdominal aorta only 7 were described as due to syphilis. Similarly only 25 aneurysms of the thoracic aorta and 89 other aortic aneurysms were stated to be syphilitic in origin out of totals of 288 and 1,068 respectively, the overall percentages in the three groups being 7 per cent syphilitic, 60 per cent non-syphilitic or with other cause stated, and 32 per cent with no cause stated.

Further details of site, type and cause of the 1,006 aortic aneurysms assigned to No. 451 are given in Table LXXIII., (page 144). The detailed allocation to sites in Tables LXXII., and LXXIII., was possible by reason of the large proportion of cases (75 per cent) where the cause of death had been confirmed by post-mortem examination. Numbers of deaths on which post-mortem examination was or was not held, are shown below.

	Total	Syphilitic (022 pt.)	Not syphilitic (451)	No cause stated (022 pt.)
P.M.	1,250	85	840	325
No P.M.	413	36	166	211

A re-arrangement of the data in Tables LXXII., and LXXIII., is made in Table LXXIV., (page) 145 to permit an easier comparison by site and cause between the reported sites and causes of dissecting and of other aortic aneurysm. The absence from the table of any dissecting aneurysms of syphilitic origin does not necessarily mean that none were reported. Those so certified, if any, would have been assigned to No. 022 and not distinguished as dissecting aneurysm in the tables.

Sex-Age Differences

Of the total of 1,663 deaths attributed to aortic aneurysm in 1952, 985 were of men and 678 of women. Two men died at ages 15-19 (assigned to No. 451) and one woman in the age group 20-24 (assigned to 022). Thereafter the numbers increased with age to reach their maximum at ages over 65 (Table LXXV, page 146), at which some two thirds of the total occurred. Deaths of men actually attributed to syphilis (all ages) outnumbered those of women by three to one (91 to 30). This ratio was lower for the other two categories of aortic aneurysm, viz., 1·2 to 1 (550 to 456) for non-syphilitic aneurysms and 1·8 to 1 (344 to 192) for aneurysms of unspecified cause. In males there was no difference in the age distribution of aneurysms described as syphilitic and non-syphilitic, but those of unstated cause tended to occur at a slightly younger age. In women, on the other hand, the non-syphilitic and unspecified aneurysms had similar age distributions, but those said to be syphilitic were too few in number for proper comparison to be made.

Table LXIX.—Syphilis: Comparative Mortality Indices and crude death rates per million living, England and Wales, 1940 to 1952.

Year	COMPARATIVE MORTALITY INDICES			CRUDE DEATH RATES PER MILLION LIVING				
	Syphilis and its sequelæ 020-029			Syphilis and its sequelæ 020-029	Aneurysm of aorta 022	Other cardio-vascular syphilis 023	Tabes dorsalis 024	General paralysis of insane 025
	Persons	Males	Females	Persons				
1940	0·90	0·91	0·88	74	16	24	11	19
1941	0·87	0·88	0·86	74	16	24	10	19
1942	0·80	0·83	0·76	69	16	24	8	17
1943	0·76	0·76	0·78	67	16	23	8	15
1944	0·68	0·68	0·70	61	16	20	7	13
1945	0·62	0·64	0·63	56	15	18	7	12
1946	0·62	0·62	0·63	54	16	18	6	11
1947	0·56	0·56	0·58	48	16	15	5	10
1948	0·49	0·49	0·50	42	15	15	3	6
1949	0·48	0·48	0·48	41	16	11	3	5
1950	0·50	0·44	0·50	39	15	14	3	4
1951	0·51	0·47	0·48	40	15	14	3	4
1952	0·46	0·40	0·49	37	15	13	3	3

Table LXX.—Syphilis and its sequelæ (International Classification Nos. 020-029). Death rates per million living in England and Wales and population density aggregates, 1950 to 1952.

(*Rates based on less than* 10 *deaths are shown in italics*)

	MALES							FEMALES						
	All ages	Under 1 year	1-24 yrs.	25-44 yrs.	45-64 yrs.	65-74 yrs.	75 yrs. and over	All ages	Under 1 year	1-24 yrs.	25-44 yrs.	45-64 yrs.	65-74 yrs.	75 yrs. and over
ENGLAND AND WALES	**56**	**42**	**0·8**	**10**	**110**	**290**	**261**	**23**	**28**	**0·7**	**5**	**38**	**81**	**105**
Conurbations, excluding Greater London	58	46	0·7	15	123	277	233	24	*44*	*1·4*	6	44	82	89
Greater London	76	*5*	*0·5*	7	128	487	497	29	*6*	*0·2*	5	44	110	192
Areas outside conurbations:														
Urban districts with populations of 100,000 and over	71	*4*	*0·7*	9	148	364	338	27	*8*	*0·7*	*3*	51	99	110
Urban districts with populations of 50,000 and under 100,000	60	*26*	*1·8*	15	116	283	270	26	*40*	*1·8*	8	39	83	118
Urban districts with populations of under 50,000	50	68	*0·9*	11	88	254	212	18	*43*	—	4	29	67	74
Rural districts	34	50	*0·8*	8	72	145	138	16	*26*	*0·7*	4	25	54	75

Table LXXI.—Aneurysm of aorta: Deaths and death rates per million living, England and Wales, 1931 to 1952.

	Number of deaths		Death rate per million living	
	Males	Females	Males	Females
1931	727	199	38	10
1932	704	205	37	10
1933	684	253	35	12
1934	723	263	37	12
1935	736	278	38	13
1936	786	303	40	14
1937	757	333	38	16
1938	757	351	38	16
1939	688	311	35	14
1940	678	279	34	13
1941	654	286	33	13
1942	634	277	32	13
1943	600	298	30	14
1944	575	338	28	15
1945	588	260	29	12
1946	666	292	32	13
1947	676	333	33	15
1948	643	316	31	14
1949	683	349	32	15
1949	688	380	33	16
1950	642	429	30	19
1951	709	435	34	19
1952	985	678	47	30

Figures for 1931 to 1939 (4th Revision Rubric No. 96) have been converted to 5th Revision classification (No. 30c) by application of factors: Males ·735; Females ·611.

Figures for 1949 are shown both by 5th and 6th Revision classifications, and for 1950 onwards by 6th Revision classification (Nos. 022, 451).

Table LXXII.—Deaths assigned to aneurysm of aorta (International Classification No. 022) and to aortic aneurysm, non-syphilitic (International Classification No. 451), according to site of aneurysm and cause by sex, England and Wales, 1952.

Site	022									451											
	With mention of syphilis			Without mention of syphilis			Total			Due to arteriosclerosis			Due to other causes			Cause not stated, (but non-syphilitic)			Total		
	M	F	P	M	F	P	M	F	P	M	F	P	M	F	P	M	F	P	M	F	P
Abdominal	**6**	**1**	**7**	**91**	**40**	**131**	**97**	**41**	**138**	**92**	**49**	**141**	**1**	**3**	**4**	**19**	**5**	**24**	**112**	**57**	**169**
Abdominal	6	1	7	90	40	130	96	41	137	92	49	141	1	3	4	19	5	24	112	57	169
Left common iliac	—	—	—	1	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Thoracic	**16**	**9**	**25**	**61**	**31**	**92**	**77**	**40**	**117**	**24**	**28**	**52**	**10**	**20**	**30**	**44**	**45**	**89**	**78**	**93**	**171**
Arch	3	4	7	13	10	23	16	14	30	4	4	8	1	10	11	19	23	42	24	37	61
Ascending	5	2	7	21	9	30	26	11	37	5	4	9	7	7	14	14	8	22	26	19	45
Base	—	—	—	—	2	2	—	2	2	—	—	—	—	1	1	—	—	—	—	1	1
First part	—	—	—	—	2	2	—	2	2	—	2	2	—	—	—	3	5	8	3	7	10
Innominate artery	—	—	—	1	2	3	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—
Into pericardium	—	—	—	3	1	4	3	1	4	—	—	—	—	—	—	—	—	—	—	—	—
Thoracic	8	3	11	23	5	28	31	8	39	15	18	33	2	2	4	8	9	17	25	29	54
Site not known	**69**	**20**	**89**	**192**	**121**	**313**	**261**	**141**	**402**	**150**	**122**	**272**	**36**	**40**	**76**	**174**	**144**	**318**	**360**	**306**	**666**
Descending	—	—	—	6	—	6	6	—	6	4	2	6	1	6	7	1	4	5	6	12	18
Dilatation of aorta	—	—	—	1	—	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Wall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	1
No statement	69	20	89	185	121	306	254	141	395	146	120	266	35	34	69	173	139	312	354	293	647
Total	**91**	**30**	**121**	**344**	**192**	**536**	**435**	**222**	**657**	**266**	**199**	**465**	**47**	**63**	**110**	**237**	**194**	**431**	**550**	**456**	**1006**

Table LXXIII.—Deaths assigned to aortic aneurysm, non-syphilitic (International Classification No. 451) according to site, type and cause, by sex, England and Wales, 1952.

Type and Site		Due to Arteriosclerosis		Due to Atheroma		Due to Calcareous degeneration		Due to Cystic degeneration		Due to Hyaline Necrosis		Due to Medial Necrosis		Due to Mucoid Medial degeneration		Cause not stated (but non-syphilitic)		All	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Aneurysm	Abdominal aorta	35	20	50	29	—	—	—	—	—	1	—	—	1	—	1	—	87	50
	Aorta N.O.S. ..	39	17	41	13	—	—	—	—	1	3	1	2	—	—	—	—	82	35
	Aortic arch ..	2	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	4	1
	Ascending aorta	2	—	2	—	—	2	—	—	—	—	1	—	—	—	2	—	7	2
	Descending aorta	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—
	First part of aorta	—	1	—	1	—	—	—	—	—	—	—	—	—	—	3	5	3	7
	Thoracic aorta ..	3	8	6	10	—	—	—	—	—	—	—	—	—	1	—	9	9	28
Dissecting Aneurysm	Abdominal aorta	4	—	3	—	—	—	—	—	—	—	—	—	—	1	18	4	25	5
	Aorta N.O.S. ..	23	37	43	53	—	—	—	1	1	—	4	2	7	7	163	133	241	233
	Aortic arch ..	—	—	—	3	—	—	—	—	—	—	1	6	—	4	17	23	18	36
	Ascending aorta	—	—	1	4	—	—	—	—	—	—	—	—	5	5	12	7	18	16
	Descending aorta	—	—	1	2	1	—	—	—	—	—	—	—	—	6	1	3	3	11
	Thoracic aorta ..	2	—	4	—	—	—	—	—	—	—	—	—	2	1	8	—	16	1
Ruptured Aneurysm	Abdominal aorta	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2
	Aorta N.O.S. ..	—	—	—	—	—	—	—	—	19	19	1	—	1	—	10	6	31	25
	Aortic arch ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	—
	Aortic base ..	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
	Aortic wall ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Ascending aorta	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	1	1
	Descending aorta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Total		**110**	**84**	**156**	**115**	**1**	**2**	—	**1**	**21**	**23**	**9**	**10**	**16**	**27**	**237**	**194**	**550**	**456**

Table LXXIV.—Deaths due to aortic aneurysm distinguishing dissecting aneurysm and other forms, according to site and cause, England and Wales, 1952.

Site and cause		"Aneurysm" or "Ruptured aneurysm"		"Dissecting aneurysm"	
		M	F	M	F
Abdominal	Syphilis	6	1	—	—
	Arteriosclerosis or atheroma	85	49	7	—
	Other (non-syphilitic)	2	3	—	1
	Without mention of syphilis	91	40	18	4
Thoracic and descending	Syphilis	16	9	—	—
	Arteriosclerosis or atheroma	20	21	8	9
	Other (non-syphilitic)	9	20	9	22
	Without mention of syphilis	67	31	38	33
Aorta, not further described	Syphilis	69	20	—	—
	Arteriosclerosis or atheroma	80	30	66	90
	Other (non-syphilitic)	33	31	12	10
	Without mention of syphilis	186	121	163	133

Table LXXV.—Aortic aneurysm—Deaths (syphilitic and non-syphilitic, and without mention of syphilis) by sex and age, and percentage distribution by age, England and Wales, 1952.

	Deaths								Percentage distribution by age							
	(022 part) with mention of syphilis		(451) Non-syphilitic or dissecting		(022 part) without mention of syphilis		(022 and 451) Total		(022 part) with mention of syphilis		(451) Non-syphilitic or dissecting		(022 part) without mention of syphilis		(022 and 451) Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**91**	**30**	**550**	**456**	**344**	**192**	**985**	**678**	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*
Under 45	4	1	23	5	5	6	32	12	*4*	*3*	*4*	*1*	*1*	*3*	*3*	*2*
45-54	8	3	48	23	36	8	92	34	*9*	*10*	*9*	*5*	*10*	*4*	*9*	*5*
55-64	21	12	124	97	106	43	251	152	*23*	*40*	*23*	*21*	*31*	*22*	*25*	*22*
65 and over	58	14	355	331	197	135	610	480	*64*	*47*	*64*	*73*	*58*	*71*	*63*	*71*

CANCER

87,642 deaths from malignant neoplasms (I.S.C. Nos. 140-205) were registered in 1952, 45,429 of men and 42,213 of women. The total number of deaths from all causes registered during the year was 497,484, cancer accounting in each sex for 17·6 per cent. During the present century deaths from cancer have become increasingly important. However, not only has the total proportion attributed to cancer increased, but the sex ratio has shown a steady change. Until recent years the larger proportion of cancer deaths was among females, but the difference has progressively decreased until during the last few years the percentage of deaths attributed to cancer is the same for each sex.

The following table shows the percentage of cancer deaths to total deaths during the period 1921 to 1952. The figures in brackets show the corresponding proportions if cancer of the lung is excluded.

	Males	Females
1921-30	*10·0 (9·7)*	*12·2 (12·1)*
1931-40	*12·1 (11·1)*	*14·0 (13·7)*
1941-45	*13·9 (11·9)*	*15·6 (15·1)*
1946-50	*16·0 (12·8)*	*16·6 (15·9)*
1951	*15·8 (11·9)*	*15·5 (14·7)*
1952	*17·6 (13·0)*	*17·6 (16·7)*

These changes have resulted from the interaction of several factors. Firstly, the increased proportion of the older adult population who are more susceptible to cancer than the young; secondly, the success of modern hygiene and therapy in preventing death from infectious diseases with the result that deaths from degenerative causes have become increasingly prominent; and, thirdly, the increasing mortality from cancer of the lung which predominantly affects males.

Table LXXVI., (page 163) shows that for both sexes the crude mortality rate from cancer (all sites) has risen since 1936 but that, while the equivalent average death rate (E.A.D.R.) for males aged 0-64 has risen, the female rate has slightly fallen. These rates and the age specific rates are shown as percentages of the corresponding average rates for 1936-39 in Table LXXVII., (page 164), where it is seen that, neglecting those under 35 who contribute little to the total, the change among men is greatest between the ages 45 and 65 and over 75, while among women the rates changed most between ages 45 and 75. That the change in sex ratio is mainly due to the rapid increase of cancer of the lung in men is shown by the figures in brackets in the table above, which demonstrate that this cancer apart the increase in the ratio of cancer deaths to total deaths has been about the same in each sex. If the figures for cancer of the lung are deducted, the crude death rate for women in 1952 had risen to 10 per cent more than the 1936-39 average while that for men had risen 7 per cent only. The E.A.D.R. for men under 65 fell 13 per cent and that for women 11 per cent.

The numbers of deaths by sex and age from cancer at different sites are given for England and Wales for the year 1952 in Table 17. Part I. The malignant tumours (I.S.C. Nos. 140-199) are classified as carcinomas, sarcomas, gliomas and undefined in Table LXXVIII., (page 164).

Tables LXXIX and LXXX., (pages 165 and 167) shows sex- and age- specific death rates per million living from cancers of certain sites in England and Wales during 1952, and as a single group all neoplasms, whether malignant, benign or unspecified, of the brain and other parts of the nervous system.

Cancer by Site

Table LXXXI., (page 169) shows for each year since 1936 the annual death rates, both male and female, for cancer of separate sites or groups of sites for nine age groups and the equivalent average death rates at ages under 35 and under 65. The rubrics of the International Statistical Classification of Diseases, Injuries and Causes of Death (6th Revision) are given at the head of each section; it will be noticed that some of the sites listed include part only of the present subdivisions. Every effort has been made to relate the present classification to the sites previously described and, except for some minor differences at older ages due to the present calculations being based on revised population estimates, these tables are comparable with those previously published (Statistical Review Vol. I Medical 1940-45, 1946-47, and 1948-49) extracts of which are given at the head of each section of Table LXXXI for 1911-20, 1921-30 and 1931-35. Owing to the recent fall in general mortality rates among children and adolescents, cancer as a cause of death at early ages has become relatively more important. As well as expressing the death rate at ages below 35 by a single figure E.A.D.R.(0-34), rates are now given for four age-groups; the E.A.D.R. for ages below 65 shows the importance of cancer mortality during the working period of life. In discussing variations or trends in the rates, attention has been concentrated upon the rise or fall as a proportion of the rate rather than upon numerical differences unrelated to the total of which they are a part.

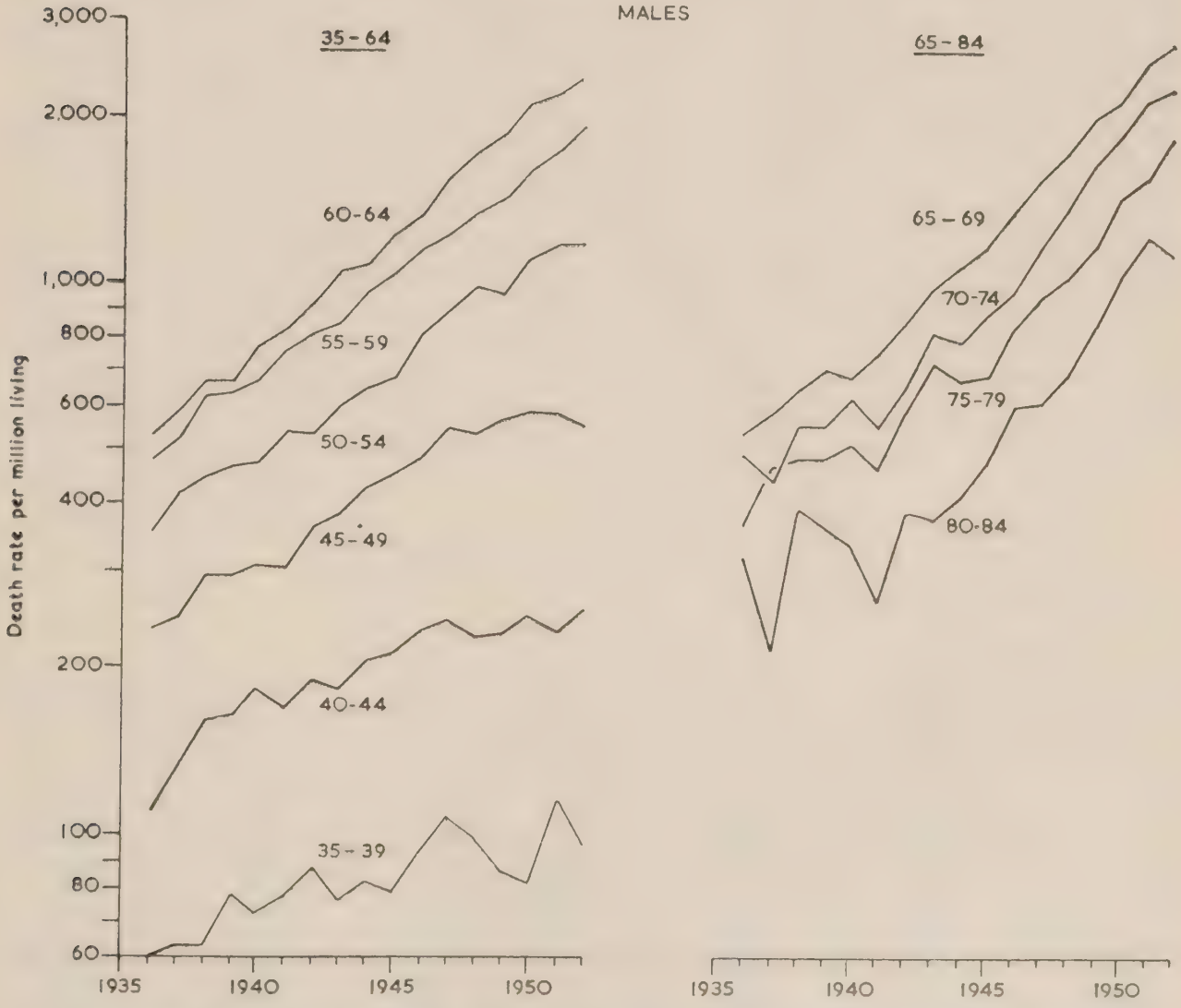
The male death rate at ages from 35 upwards for cancer of all sites (I.S.C. Nos. 140 - 205) has risen since 1936, the rise having been most rapid between 45 and 55 years. Over age 75 the rate fell slightly between 1936 and 1944 and then rose until it is now 14 per cent higher than in 1936-40, reflecting to some extent the course of the death rate from all causes. The next section of Table LXXXI shows the death rate for all sites excluding lung and bronchus (I.S.C. Nos. 162 and 163) and, in comparison with the previous section, shows to what extent cancer of the lung has influenced the present mortality trends. At ages 55 to 74 rates have steadily fallen as also has the E.A.D.R. (0-64); between 35 and 45 there has been little change, while above 75 the trends are similar to those when cancer of the lung is included. The female death rate has been less influenced by cancer of the lung. In both sections the rates between ages 35 and 75 and the E.A.D.R. (0-64) have tended to fall. Over age 75 the rate fell slightly until 1944, since when there has been a rise. This sequence, a tendency for death rates at ages below 65 to fall while the rate above 75 remains constant or rises, is seen at several important sites, notably:—in both sexes: mouth, larynx, and rectum; in males: œsophagus and prostate; in females: stomach and uterus. At few sites only has the death rate above 75 years consistently declined and these are sites which contribute little to the total deaths from cancer; lips, liver, and skin in both sexes, and tongue in males. At the following sites death rates have risen in all age groups; males: lung, kidney, bladder, brain and central nervous system; and females: lung and ovary. The factors inducing these changing trends are complex and must vary from site to site. Possible explanations include:—(*a*) changes in the rate of incidence or average age incidence of certain cancers, due possibly to altering intensity of carcinogenic factors; (*b*) the influence of medical or surgical treatment in prolonging the life of those afflicted with cancer of certain sites; (*c*) the increased proportions of people alive in the older parts of the age-group over 75 years. This increase is however small and could not substantially affect the death rate.

Some indication of the factors responsible may be found by comparing mortality experience derived from registered deaths with the case registrations and crude survival rates derived from the Cancer Registration Scheme. This is done for some of the sites considered in later paragraphs; the case registrations used are those of 1947 and 1948,* which are more complete than the 1945-46 figures, while crude survival rates are taken from the 1945-46 case registrations, since analysis of the results of the 5-year follow up has not yet been completed for later years. The crude survival rate used is the proportion alive five years after registration of those who had not been treated prior to registration. Although case registration is very incomplete there is sufficient information at many sites to provide valuable indications.

Cancer of the Lung Bronchus and Pleura (I.S.C. No. 162 (excluding trachea) Nos. 163 and 165 (part))

In the sixth revision of the International Statistical Classification cancer of the lung is distinguished under three heads as primary (No. 162), unspecified as to whether primary or secondary (No. 163) and secondary (No. 165, which includes Mediastinum and Thoracic organs specified as secondary). Since 1949 the proportion of lung cancer deaths specified as primary has been:—1949: 24·53 per cent, 1951: 27·31 per cent and 1952: 30·69 per cent.

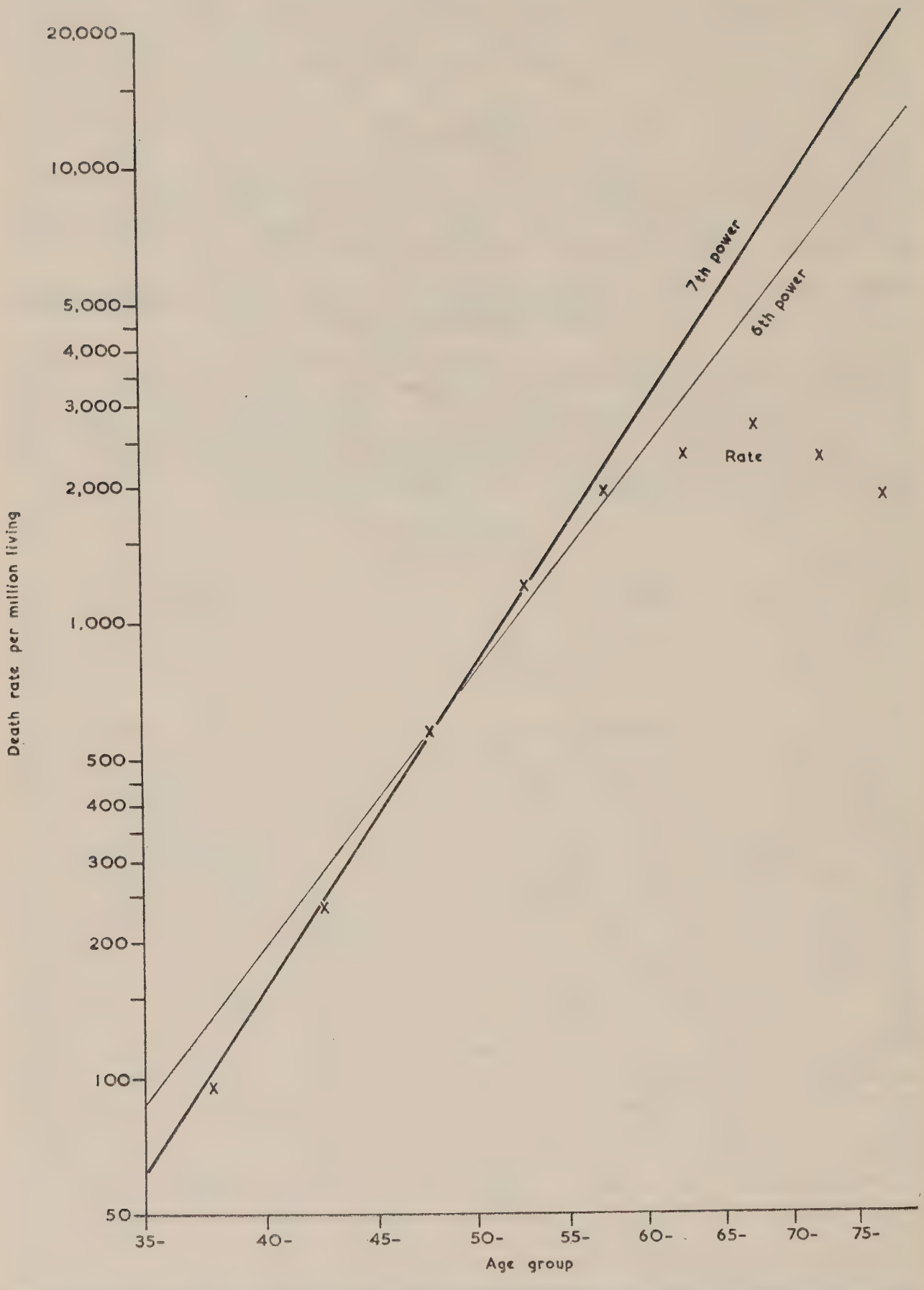
Diagram 12



Cancer of lung; male death rates per million living in five-year age groups 1936 to 1952

* 1947 and 1948 case registrations have been published in a supplement to the Statistical Review for 1949:—Supplement on General Morbidity, Cancer and Mental Health. (H.M.S.O. 7s. 6d. net).

Diagram 13



Cancer of lung; present age-specific male death-rates, and possible future trends

The table shows an increase in the death rate for all ages and in both sexes since 1911. Not only is the male death rate at all ages higher, but the rate of increase in each age group has been more rapid compared with the corresponding female rate; the male E.A.D.R. (0-64) is now more than three and a half times and the female rate less than twice the 1936 figure, while over 75 years

the male rate has increased nearly five times and the female rate less than three and a half times. To afford a more detailed analysis of the changes in the male death rate they have been calculated in five year age periods and are shown in Diagram I2. During the last few years the rate of increase of the death rate below 50 years of age has lessened and at these ages there has been little change during the last five years. At ages 50-54 years there are some signs that the upward trend has slowed down or ceased, but above 65 years the rate of increase is, if anything, more rapid.

If we accept the suggestion that below 50-54 years the rate has stabilised, it is possible to make a tentative estimate of the future course of the mortality rates of carcinoma of the lung. Fisher and Hollman (1951) and Nordling (1953) found that between 25 and 75 years the death rate for non-genital cancers increased proportionately with a power of the age (usually the sixth). Using these assumptions and the suggestion above that the rate is now stable at certain ages, we have three or four points on the hypothetical curve of the trend and by extrapolation can forecast its final form. Diagram 13 shows this graphically; the figures used for the age group 35 to 49 are the means of the rates during the last five years, the remaining rates are those of 1952. The logarithm of the centre point of each age group has been plotted against the logarithm of the corresponding death rate per million so that an increase of rate proportional to any power of the age will be shown by a straight line. The broken line shows a hypothetical final rate if the increase in rate with age follows the sixth power of the age. On this assumption we should ultimately have the following death rates; at ages 50-54, 1,030; at 55-59, 1,800; at 60-64, 2,980; at 65-69, 4,700; at 70-74, 7,300 and at 75-79, 10,900. Deaths from lung cancer between the ages of 35 and 80 years would then number 19,990 which is 8,368 more than the present figure. Using the seventh power of the age, which gives a better fit to the 4 datum points and is shown by the continuous line, the final rate at ages 55-59 would be about 2,200 per million ; at 60-64, 3,900; at 65-69, 6,800 and at 70-74, 11,000 per million, while the total deaths between 35 and 80 years of age would amount to 27,901 (16,279 more than the 1952 figure). On these assumptions it seems probable that, if we make no allowance for future changes in age distribution of the population, the deaths between these ages from cancer of the lung will increase to more than double the present figure. If the present trends continue, the curves suggest that this final position should be reached by 1969.

Age group	No. of Deaths in 1952	Mortality rates*		Projected (Death rate x 7th power of age)		
		in 1952	used in the estimation	mortality rate	Annual No. of Deaths	Year when rates become stable
30–	56					
35–	152	96	95	106	165	
40–	427	255	239	257	430	
45–	885	555	565	565	901	
50–	1599	1171	1171	1146	1565	
55–	2163	1942		2180	2429	1955
60–	2229	2334		3930	3753	1959
65–	2114	2700		6760	5293	1961
70–	1348	2289		11200	6597	1965
75–79	705	1865		17900	6766	1969
Total Deaths	11622				27901	

.* Based on unrevised population estimates—see note 1 on page IX.

The table on previous page shows the recorded male deaths and death rates in 1952 and the projected rates in 1969 in accordance with the assumption that the incidence of cancer of the lung increases with the seventh power of the age. The dates in the last column have been obtained from the average rates of increase during the last ten years.

Cancer of the breast and female genital organs

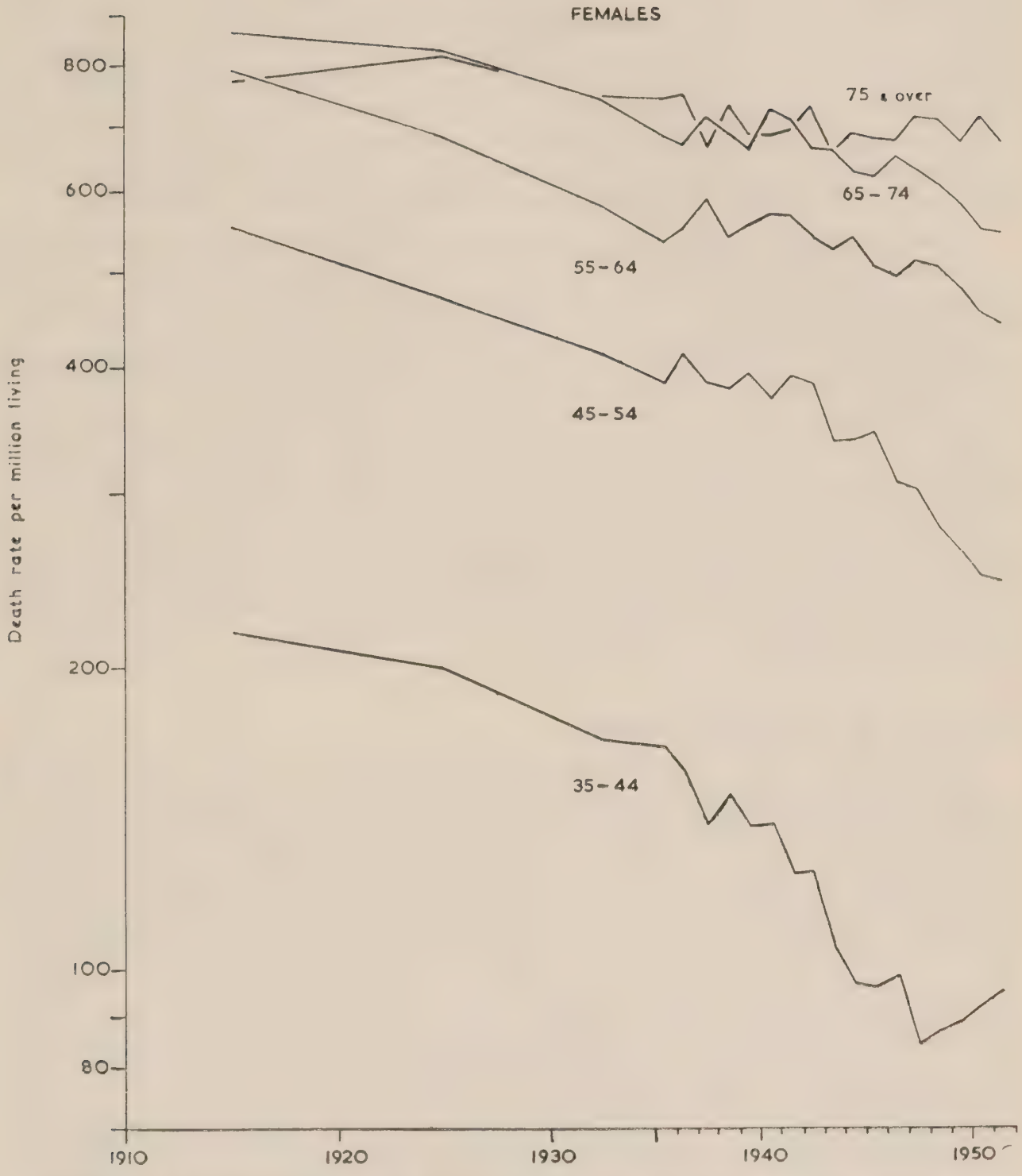
This group accounts for 36 per cent of all deaths from cancer among women; within the group breast comprises 54 per cent, uterus 26 per cent and ovary 16 per cent. **Cancer of the breast (I.S.C. No. 170)** accounts for about 20 per cent of all female deaths from cancer. During the past 30 years the female death rate from cancer of the breast has changed little and recent developments in treatment do not appear to have improved the rate of survival. In 1924 Lane Claypon analysed the records of nearly 9,000 patients who had received what was then called the modern or complete operation and found a three year survival rate of 43 per cent; Harnett in 1939 analysed the London hospitals figures and found a five year survival rate of 31 per cent, the same figure being found in an analysis of the 1945 and 1946 cancer registrations. It is probable however that an increasingly large number of women have been afforded the chance of operative treatment in recent years and on these grounds alone it might be expected that the general death rate should fall. Whether this absence of change is due to an increase in incidence of breast cancer or to other causes cannot be resolved until the registration of cases of cancer during life is more complete than at present. The numbers of registrations under the cancer scheme have mounted steadily and in 1948, the last year for which figures are available, did actually exceed the number of deaths in that year; but not until better information is available of the number of cases that occur yearly shall we be in a position to advance any firm opinion as to the results of treatment.

Cancer of the Uterus (I.S.C. Nos. 171-174) amounts to about 10 per cent of all female deaths from cancer. Since 1950, if the uterine site has not been specified on the death certificate, the certifying practitioner has been asked whether further information is available and for a large proportion of deaths more accurate localisation has been possible. For the years 1946-49 and the years 1950-52 the proportions of deaths under the following sub-heads were:—

	Per cent	
	1946-49	1950-52
Total cancer of uterus (171-174)	*100*	*100*
Cancer of the cervix (171)	*44*	*64*
Cancer of the corpus (172)	*9*	*29*
Cancer of the uterus, unspecified (174) ...	*46*	*6*

The remainder of this group (I.S.C. No. 173) Chorionepithelioma and other parts of the uterus, accounted for less than 1 per cent of the total. Considering cancer of the uterus as a single entity, below 75 years of age the death rate at all ages has fallen, most markedly since 1940, and at a proportionately faster rate between the ages of 35 and 55 than at other ages. Above 75 years of age there has been little change (see Diagram 14). Carcinoma of the uterus is a disease of middle life, incidence being greatest between 50 and 60 years of age and the natural (untreated) mean duration being given by Greenwood (1926) as about 20 months. If this were the whole story the death rate should tend to fall after about the age of 60; this was so to some extent between 1911 and 1920 when the death rate over 75 was exceeded by that at ages 55-74 and between 1921 and 1930 when it was exceeded by that at ages 65-74 (Diagram 14). To what extent this was due to non-recognition of uterine cancer in the very old cannot be decided, but the more recent fall at earlier ages combined with the absence of change beyond 75 years suggests the intrusion of other factors.

Diagram 14



Cancer of Uterus; death rates per million living according to age, 1911-20, 1921-30, 1931-35 and 1935 to 1952

The rate of registration of cancer of the uterus under the national registration scheme is high; in 1948 the ratio of cases registered during life to deaths was four to five and, of those registered, less than 7 per cent were untreated, while the 5 year survival rate of all those treated after registration was 36 per cent; it would seem possible therefore to attribute much of the declining rates to the effect of treatment, though a greatly diminished incidence with a later average age of onset could produce a similar effect. (On the assumption that the incidence remains constant and the death rate follows (with extrapolation) that calculated from the follow-up of registered cases in 1945-46, a theoretical death rate for cancer of the uterus was computed, and it was found that the expected death rate at older ages approximated closely to the average from 1947 to 1951 and did not fall with increasing years).

Cancer of the ovary (I.S.C. No. 175 but excluding cancer of the broad ligament) accounts for about 6 per cent of all female deaths from cancer. Since 1936 the recorded death rate has increased at all ages above 45 years. Above 55 years of age the death rate does not appreciably vary with age. The number of registrations of cancer of the ovary in 1947-48 amounted to about one half the deaths recorded in those years and, since the crude 5 year survival rate was but 15 per cent, it is not possible to ascertain whether treatment should be expected to influence the mortality rates. It seems equally possible that the increased rates are due to a change in incidence or improved diagnosis and certification.

These three sites, breast, uterus and ovary, make up more than a third of the total cancer among women and the five-year survival rates of the first two are comparatively high. In cancer of the breast there has been no change in mortality over many years, the mortality from cancer of ovary has risen while that of the uterus has fallen. Examinations of such figures as are available do not distinguish the possible results of variations in incidence or the effects of treatment upon mortality rates. Such an analysis will not be possible until cancer registration covers a very much larger proportion of existing cases than at present; it should then be possible to learn whether the incidence of cancer is changing and whether treatment is proving effective. At present one can only hazard a guess that in cancer of the breast the incidence is increasing or that treatment does not influence mortality rates (which from the five-year survival rate appears improbable); that in cancer of the ovary the incidence is probably increasing and finally that in cancer of the uterus treatment has reduced mortality but that incidence may also be declining.

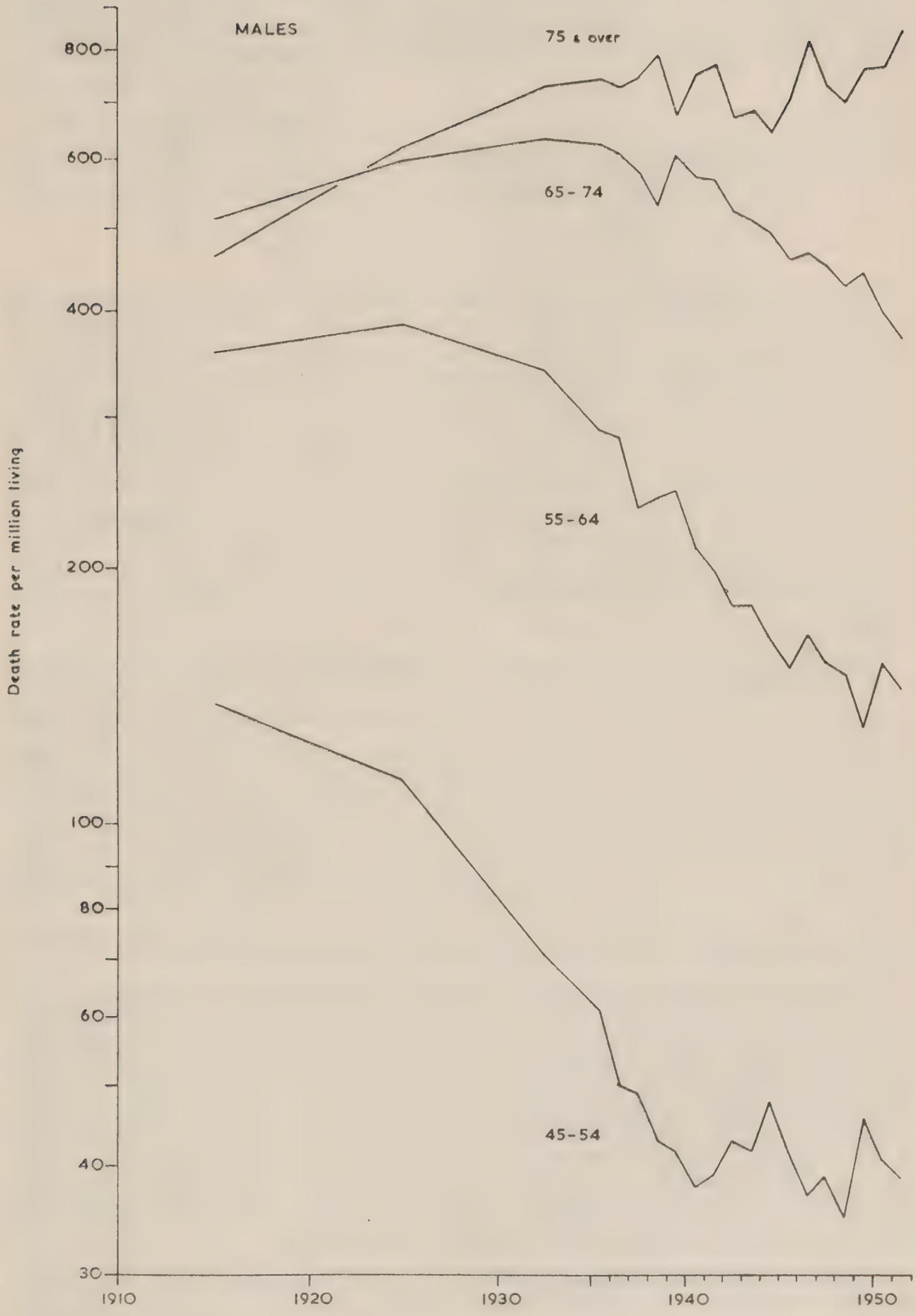
Cancer of the male genital system

This group (in which is included prostate I.S.C. No. 177, testis I.S.C. No. 178 and other and unspecified male genital organs I.S.C. No. 179) amounted to 7·4 per cent of the total male deaths from cancer in 1952. Of these prostate accounted for 6·6 per cent, testis for 0·46 per cent and penis 0·3 per cent. Deaths from **cancer of the prostate (I.S.C. No. 177)** are not common under 65 years of age; thereafter the death rate increases rapidly, paralleling closely the age distribution curve of deaths from other diseases of the prostate. For ages over 75 years the death rate has risen and is now over 50 per cent higher than it was in 1936, in contrast to the trend of other prostatic disease where the death rate over 75 and indeed at all ages has fallen. **Cancer of the testis (I.S.C. No. 178)** includes many growths of the so-called "embryonal carcinoma" type and the age distribution of deaths from this cause is widely spread. Death rates at all ages are small and have changed very little. The age distribution curve for **cancer of the penis (part of I.S.C. No. 179)** follows the usual cancer age distribution curve, the incidence being greater with increasing age. Death rates, though fluctuating widely, have tended to fall especially below 75 years of age.

Cancer of the bladder (I.S.C. No. 181)

This site accounts in males for 4 per cent and in females 2 per cent of the total cancer deaths. At all ages and in both sexes the death rates have risen steadily, female less than male, while at corresponding ages the female death rate is about one third of the male. In the older age-groups the male rate is now nearly double what it was in 1911-20 while the equivalent average death rate (E.A.D.R.) at ages 0-64 is now 40 per cent above the 1936 figure. Carcinoma of the bladder is an industrial hazard in certain processes in the chemical industry and some of the increased mortality may be due to the action of a recently effective irritant rather than to improvements in diagnosis or certification.

Diagram 15



Cancer of Œsophagus; male death rates per million living according to age, 1911-20, 1921-30, 1931-35 and 1936 to 1952

Cancer of the digestive tract

This group comprises the following sites: œsophagus, stomach and duodenum, intestines, both large and small, and rectum (excluding anus). These sites account in males for 38 per cent and in females 36 per cent of all deaths from cancer. The proportions within the group are shown below:—

	Per cent	
	Male	Female
Total cancer of the digestive tract	*100*	*100*
Cancer of œsophagus	*9*	*6*
„ „ stomach and duodenum	*47*	*42*
„ „ intestine	*25*	*37*
„ „ rectum	*20*	*16*

Cancer of œsophagus (I.S.C. No. 150) accounts for 3 per cent in males and 2 per cent in females of all cancer deaths. The male death rates for cancer of the œsophagus between 45 and 75 years have shown a remarkable decline in recent years (Diagram 15). In the age groups 45 to 54 the fall commenced in the early years of the century, the rate for 1921-30 and 1931-35 being 81 per cent and 51 per cent respectively of the 1911-20 rate. In 1940 it had fallen to about 30 per cent, where it has since remained. Between 55 and 65 years of age the fall appears to have commenced about 1930, the rates for 1921-30 and 1931-35 being 108 per cent and 96 per cent of the 1911-20 rate and the ratio now being 41 per cent. Between 65 and 75 years the change occurred about 1940 and the present rate has fallen to about 60 per cent of the rate in that year. Above 75 the rate has fluctuated considerably but without any indication of a regular trend.

Since the recovery rate from cancer of the œsophagus is so low these changes cannot be attributed to improved treatment and are consistent with one of two explanations: (*a*) Conforming with the hypothesis that neoplastic change may be initiated comparatively early in adult life, the prevalence of the carcinogen may have declined towards the end of the last century. (*b*) The intensity of the irritant factors producing the carcinomatous process may have progressively decreased thus prolonging the latent period and postponing the age of incidence. If the first explanation be valid, we may shortly expect a fall in the death rate over 75 years, if the second, the fall at these older ages should be delayed. Among women, the rates at all ages are lower than for men and though there has been a fall in the E.A.D.R. (0-64) this appears to be due to a decline between 45 and 55 years; above this age the rate has shown no considerable change.

Cancer of stomach and duodenum (I.S.C. No. 151 and part of No. 152) accounts for 17·8 per cent of male and 15·1 per cent of female deaths from cancer. Amongst males there has been little change since 1936, a slight fall in the E.A.D.R. (0-64) reflecting mainly changes between 45 and 55 years of age. Over age 75 after fluctuating around 2,700 per million until 1941, the rate fell in 1942 to 2,438, since when it has steadily risen to the present figure of 3,042. For women the E.A.D.R. (0-64) has declined by about 25 per cent over the period, most rapidly during the last 8 years. The downward trend is most marked at earlier ages though still discernible between 65 and 75; above 75 years the death rate follows a similar course to the corresponding male rate.

Cancer of intestines (remainder of I.S.C. No. 152 and No. 153) accounts for 9·3 per cent of male and 13·5 per cent of female deaths from cancer. Rates for both men and women show similar trends. Over 75 years of age the rates have shown no change since 1936 but at lower ages and especially since 1945 the rates have fallen. The E.A.D.R. (0-64) has declined about 30 per cent for males and 20 per cent for females since 1936.

Cancer of the Rectum (I.S.C. No. 154) caused 7·5 per cent of male and 5·7 per cent of female deaths from cancer. At all ages the rate for females was lower than that for males. The E.A.D.R. (0-64) has fallen in both sexes, falling more rapidly since 1945 (for males 30 per cent and for females 18 per cent). All ages under 75 have participated in this fall while above age 75 the rate in both sexes has tended slightly to rise.

Only a small proportion of cancers of the digestive tract appear to have been registered during life and it is uncertain how many of them received treatment. Five year survival rates from the 1945-46 registrations are given below with the percentage of newly registered cases found suitable for treatment.

	Five year Survival Rate (per cent)		Percentage of newly registered cases treated	
	Male	Female	Male	Female
Œsophagus	*1*	*3*	*61·1*	*66·7*
Stomach	*5*	*3*	*35·5*	*32·7*
Intestine	*10*	*14*	*67·2*	*65·4*
Rectum	*11*	*17*	*73·5*	*73·3*

It seems improbable that the fall in death rates from cancer of the stomach among women has been due to treatment; a decline in incidence appears more likely, while the absence of any corresponding fall in male rates is striking and invites further investigation. Treatment may however have been a factor in reducing the mortality rate in cancer of the intestine and rectum.

Cancer of the mouth and upper respiratory passages

This group comprises lips (I.S.C. No. 140), tongue (I.S.C. No. 141) mouth and tonsil (I.S.C. Nos. 143-144 and part of 145), pharynx (the remainder of I.S.C. No. 145, Nos. 146, 147 and 148) and larynx and trachea (I.S.C. No. 161 and part of 162 and 165). The group accounted for 4·7 per cent of male and 1·8 per cent of female total cancer deaths in 1952.

Cancer of the lip (I.S.C. No. 140) now amounts to only 0·2 per cent for males and 0·04 per cent for females of total cancer deaths. The male rate has fallen very considerably over the past 30 years being now less than half of what it was in 1911-20. Since the male registrations outnumber the deaths by rather more than three to one it is probable that a considerable proportion of this fall is due to treatment rather than to diminished incidence; female rates have also fallen but less dramatically. For females the proportion of deaths to registered cases is slightly less than for males. **Cancer of tongue (I.S.C. No. 141)** accounted for 1 per cent of male and 0·3 per cent of female deaths from cancer. Rates for males have fallen at all ages but mainly below 75 years, the E.A.D.R. (0-64) being now about one quarter of the 1936-37 figure. The female death rate has shown little change. In 1947-48 the registrations nearly equalled the recorded deaths and the crude survival rates (five years) were 14 per cent for males and 30 per cent for females. It is doubtful whether treatment alone can account for the fall in the male death rate which may also reflect a considerable decline in incidence.

Cancer of mouth and tonsil (I.S.C. Nos. 143-144 and part of 145) accounts for 0·9 per cent for males and 0·3 per cent for females of total cancer deaths. At ages below 75 male rates fell until 1949, since when there has been a slight rise.

[The E.A.D.R. (0-64) in 1949 was less than one third of that in 1936-38]. Over age 75 the death rate has not changed. In 1947 and 1948 the registrations of cancer of the mouth and tonsil were approximately double the recorded deaths in those years, suggesting that successful treatment has considerably influenced the mortality rates. **Cancer of pharynx (rem. of I.S.C. No. 145, Nos. 146, 147, and 148)** was the site of 0·9 per cent of male and 0·7 per cent of female deaths from cancer. The trends of male mortality closely follow those of the mouth and tonsil, falling at ages between 55 and 75 until 1948 and then rising slightly. Female rates did not appear to change. At this site registrations were nearly double the recorded deaths in 1947-48 and the conclusion that the treatment was the main factor in producing the decline in rates appears justified. **Cancer of the larynx (I.S.C. Nos. 161, part of 162, and part of 165)** caused 1·7 per cent of male and 0·5 per cent of female deaths from cancer. Above 75 there has been no change in the male rate but both the E.A.D.R. (0-64) and the rates between ages 45 and 75 have fallen by about 40 per cent since 1936 while the female rates have remained constant. Since registration in 1947 and 1948 was for men about 57 per cent and for women 25 per cent of the recorded deaths, no inference as to the effect of treatment on mortality can be drawn. The five-year crude survival rate for both sexes was about 20 per cent.

Cancer of the skin (I.S.C. Nos. 190, 191)

The table includes deaths from malignant melanoma, rodent ulcer and all other cancers of the skin. Melanoma accounts for a quarter of one per cent of all male and just under one half of one per cent of female deaths from cancer; two thirds of the deaths from melanoma occurred before the 65th year while four fifths of the remaining cancers of the skin were recorded after that age. Cancer of the skin other than melanoma accounted for 0·8 per cent of male and 0·7 per cent of all female deaths from cancer. Male rates have fall at all ages over 55 and most markedly in the 75 and over age group where the rate is now less than one half of that in 1936. Female rates under 65 years have changed little but above that the fall corresponds to that for males. In 1947-48 the registrations outnumbered deaths by more than six to one, suggesting that the survival rate was even higher than that given at most clinics. Increased facilities for treatment rather than improvement in technique are probably responsible for most of the fall in mortality; there is no evidence to suggest what effect if any may be due to a change in incidence.

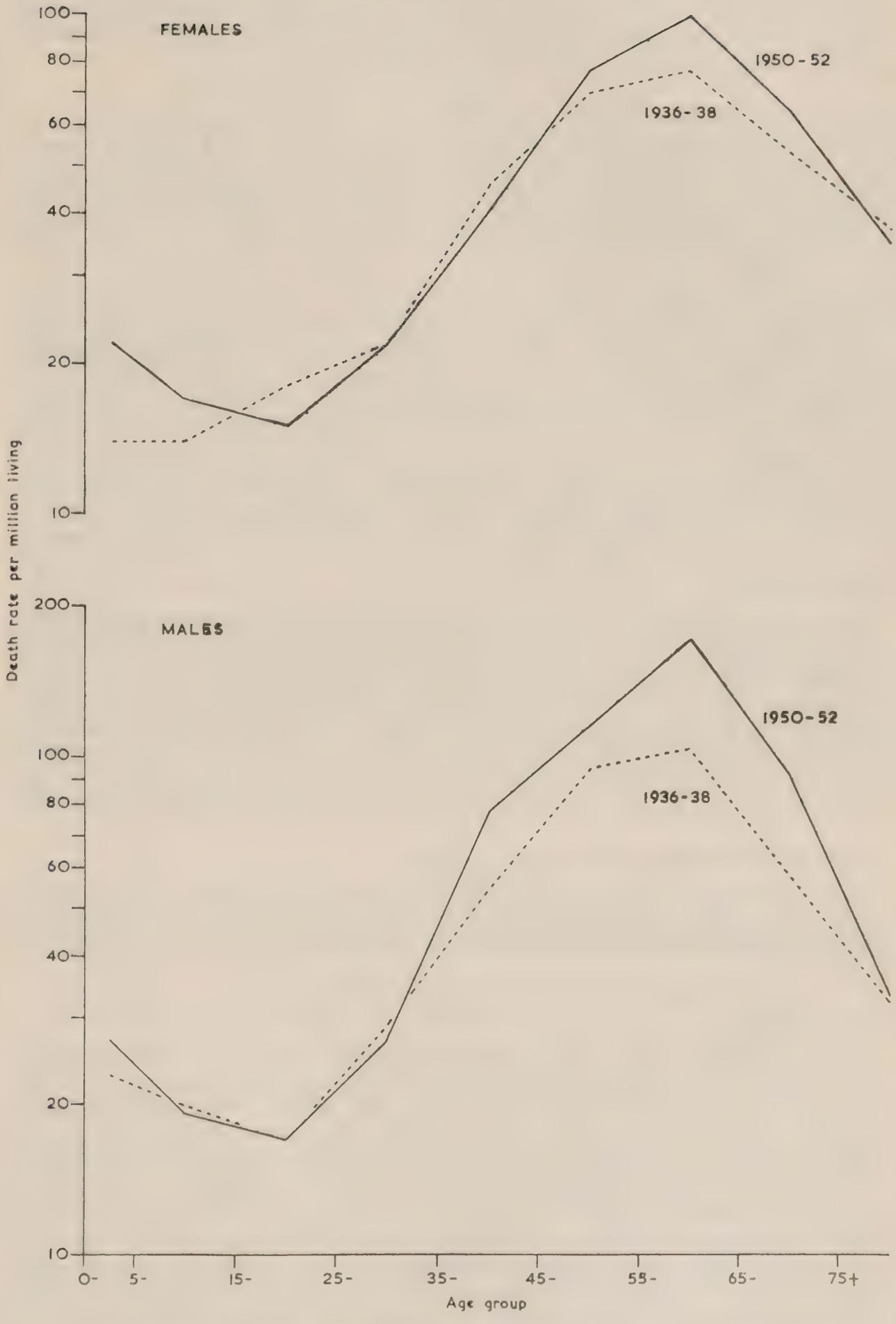
Cancer of the kidney (I.S.C. No. 180)

This was recorded as the cause of death in 1·4 per cent of male and 1·1 per cent of female deaths from cancer. Death rates have tended to rise at all ages from 55 upwards among males, most noticeably since 1947; for ages above 65 the rate in 1952 was approximately double that of 1931-35. Female death rates at ages 65 and upwards have slightly increased, but below that there has been no change.

Cancer of the liver (I.S.C. No. 155 (part) and No. 156)

This site accounted for 1·6 per cent of male and 1·4 per cent of female deaths from cancer. The downward trend that started in the early years of the century has continued and the present rates are but a fraction of those for 1911-20 when they amounted to about 10 per cent of all cancers. This must be taken as a measure of improved diagnosis and certification, whereby many cases, where death was previously attributed to terminal metastases in the liver, are now allocated to their proper primary site. Of those deaths attributed to cancer of the liver in 1952 only 24 per cent of male and 21 per cent of female deaths were specified as primary, the remainder being classed as secondary or unspecified.

Diagram 16



All tumours of brain and C.N.S.; death rates per million living, by sex, according to age, 1936-38 and 1950-52

Cancer of the gall bladder and ducts (part of I.S.C. No. 155)

From this site were recorded 0·8 per cent of male and 1·6 per cent of female deaths from cancer. Since 1936 male rates have shown little change while female rates have somewhat fallen. The ratio of male to female deaths, which is generally about two to one, has changed little.

Cancer of the pancreas (I.S.C. No. 157)

This site was certified as the cause of death in 3·8 per cent of male and 3·7 per cent of female deaths from cancer. Increases in the certified death rate have occurred in each recorded period at all ages and in both sexes since 1911. It is probable that this increase is not real but may more properly be attributed to better diagnosis and certification.

Tumours of the brain and central nervous system

Since they are more often lethal on account of their mechanical effects than from the results of metastatic spread, **tumours of the brain and central nervous system** have been included under one head whether malignant, benign or of uncertain nature. They comprise malignant tumours (I.S.C. No. 193), benign tumours (I.S.C. No. 223) and tumours of unspecified nature (I.S.C. No. 237). The mortality rates from these tumours vary little below 25 years of age when they increase until between 55 and 65 years of age after which they again fall. Since 1936 mortality rates have shown slight increases under 25 years of age and over 55 years of age, otherwise there has been little change (Diagram 16).

Cancer of bone

In the Sixth Revision of the International List **malignant tumours of the jaw** have been included under the general head of **malignant tumours of bone (I.S.C. No. 196)** which account for 0·9 per cent of male and 0·8 per cent of female deaths from cancer. It is probable that in the past many deaths attributed to cancer of the jaw were really extensions from primary sites in the mouth, and due to better diagnosis and certification the rates have fallen considerably of recent years. Mainly due to this reason, mortality rates from cancer of bone have fallen at all ages and the rate is now about one half of that in 1936 to 1938.

Cancer of the thyroid gland (I.S.C. No. 194)

This site accounts for about 0·2 per cent of male and 0·6 per cent of female deaths from cancer. Female rates have changed little but there has been an increase in deaths attributed to cancer of the thyroid in males of 75 years and over.

The Reticuloses

In the Sixth Revision of the International List of Causes of Deaths, diseases of the lymphatic and hæmatopoietic tissues were included among the neoplasms; they are listed under I.S.C. Nos. 200 to 205. They differ in many important respects from classical cancers, which might now well be distinguished under the name of malignant tumours. For example the age distribution does not follow the classical cancer curve where, with the exception of embryonal and certain genital tumours, the incidence increases very rapidly and regularly with increasing age. Some of the reticuloses are more common during early life and the increase in incidence with age is never so rapid as with the neoplastic tumours. As causes of death the most important are Hodgkin's disease, the various forms of leukæmia, the lymphosarcomata, and the multiple myelomata. The reticuloses are the cause of 5 per cent of male and 4 per cent of female recorded deaths from all malignant neoplasms. The proportion of each main division within the group is set out below.

	Per cent	
	Male	Female
Total for reticuloses	*100*	*100*
Hodgkin's disease (lymphadenoma)	*21*	*16*
Leukæmia and aleukæmia	*48*	*54*
Lymphosarcoma and reticulosarcoma ...	*20*	*17*
Multiple myeloma (plasmocytoma)	*7*	*10*

Hodgkin's Disease (I.S.C. No. 201). Under 75 years of age the male death rate is approximately double the female rate for corresponding age-groups and in general the rates increase with advancing age though comparatively slowly. Frequently for a single year the death rate in one age-group will exceed that in the next older group and occasionally such an inversion occurs in several consecutive years as in 1942 to 1944 and in 1946 and 1947 when the female death rate at 25-34 years exceeded that at 35-44. It seems probable that this "run" happened by chance and is a result of the low age mortality gradient. Death rates above 25 years of age have been increasing since 1911 and the crude death rate has more than doubled. No change in the age distributions appears to have occurred and the ratio between male and female deaths has remained constant, male deaths being 150 to 200 per cent higher than female.

Leukæmia and aleukæmia (I.S.C. No. 204). The age curve of the death rates from the leukæmias follows an irregular course; the mortality during infancy, which is highest between the third and the fifth year, falls rapidly until the late twenties (Diagram 17). After 35 years of age it again increases until late old age when it appears to fall. Since 1936 there has been an increase at all ages in the death rate; in infancy it is now about double what it was in 1936 while at older ages the increase has been as great or greater, being about double between 55 and 75 and more than treble at ages over 75. In the age group 75-84 the death rate is now higher than in the previous age group, which has seldom been the case before. Since about 1946 or 1947 there has been a very rapid increase in recorded mortality at these late ages which may be partly due to better diagnosis due to the extension of medical care given to the elderly since the war and to the increased facilities available to them under the National Health Service.

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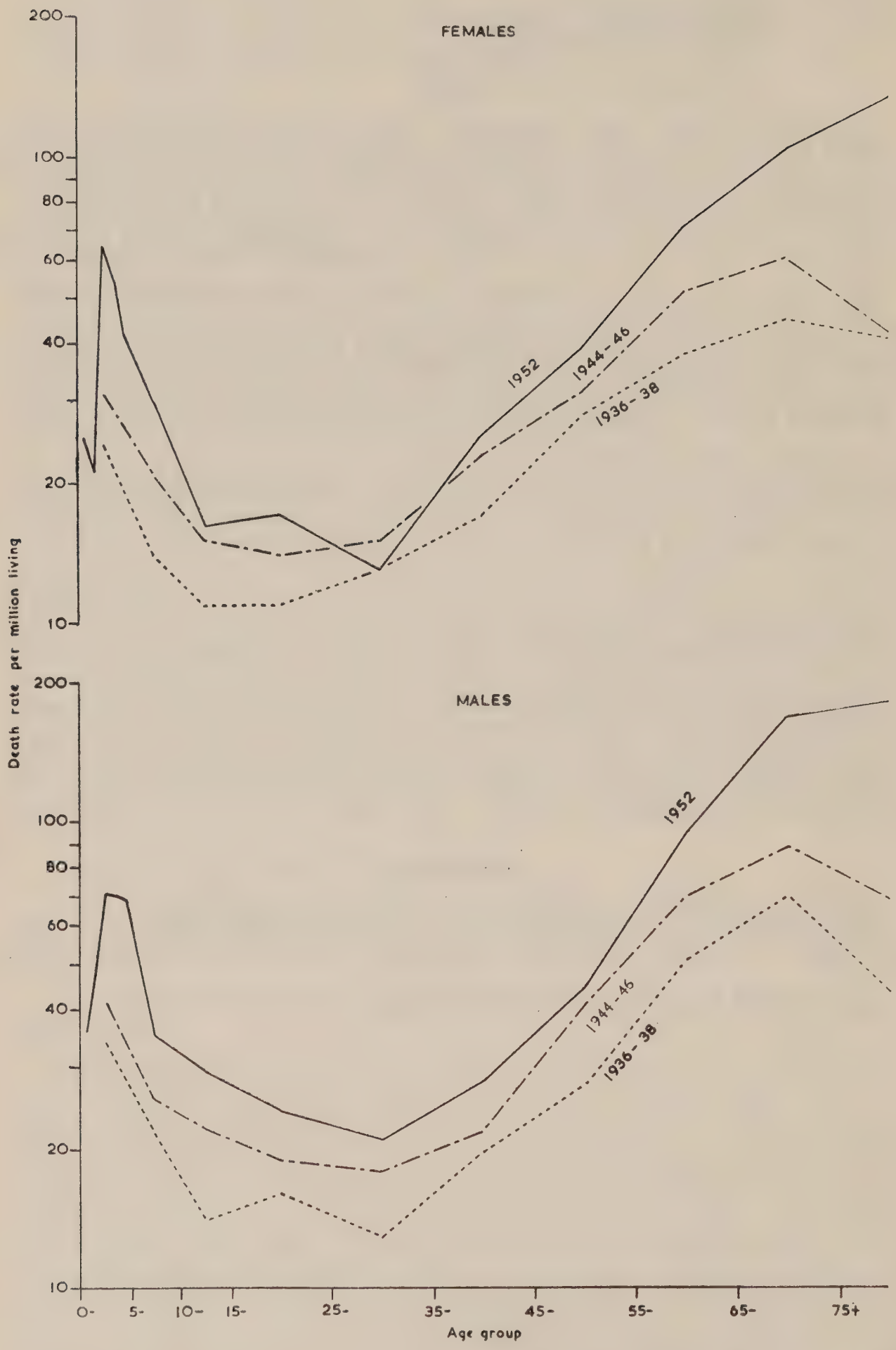
Diagram 17



Leukæmia and aleukæmia; death rates per million living according to sex and age, 1936-38, 1944-46 and 1952

Table LXXVI.—Cancer*: sex and age specific death rates per million living, and E.A.D.R. (ages 0-64). England and Wales, 1936-39, 1940-44 and each individual year, 1945 to 1952

	1936–1939	1940–1944	1945	1946	1947	1948	1949	1950	1951	1952
	Males									
Crude Death Rate (all ages)	**1,635**	**1,743**	**1,844**	**1,876**	**1,928**	**1,963**	**1,991**	**2,058**	**2,121**	**2,152**
E.A.D.R. (ages 0–64)	1,111	1,134	1,185	1,196	1,225	1,244	1,241	1,274	1,308	1,326
0–	86	88	95	83	112	101	116	106	108	130
5–	51	61	57	67	65	65	64	62	74	70
15–	85	82	86	94	94	91	102	100	91	102
25–	175	169	189	184	190	169	180	177	177	182
35–	505	542	557	574	594	574	559	549	595	568
45–	1,673	1,762	1,856	1,956	1,940	1,995	1,964	2,066	2,068	2,073
55–	4,692	4,712	4,908	4,858	5,024	5,142	5,140	5,275	5,446	5,562
65–	9,791	9,909	9,864	9,799	10,071	10,246	10,362	10,324	10,591	10,540
75 and over	14,398	14,149	13,757	14,285	14,645	14,732	15,238	15,820	16,358	16,552
	Females									
Crude Death Rate (all ages)	**1,632**	**1,697**	**1,738**	**1,773**	**1,792**	**1,799**	**1,819**	**1,840**	**1,820**	**1,848**
E.A.D.R. (ages 0–64)	1.093	1,073	1,047	1,057	1,040	1,033	1,021	1,017	998	1,011
0–	66	70	81	79	91	81	106	96	102	103
5–	36	41	46	43	42	41	45	56	49	56
15–	64	61	62	61	63	64	71	60	66	66
25–	182	192	191	188	186	177	188	194	190	170
35–	744	714	705	715	707	674	689	685	711	709
45–	2,049	2,025	1,937	1,977	1,941	1,936	1,889	1,863	1,814	1,836
55–	3,999	3,907	3,823	3,848	3,778	3,780	3,704	3,706	3,608	3,680
65–	7,089	6,891	6,732	6,808	6,769	6,715	6,757	6,695	6,489	6,424
75 and over	11,019	10,448	10,274	10,493	10,965	10,825	11,001	11,308	11,036	11,045

* Up to and including 1948: 5th Revision (Nos. 45–55 together with Hodgkin's Disease (44b) and Leukæmia and Aleukæmia (74)). 1949–52: 6th Revision (Nos. 140–205).

Table LXXVII.—Cancer*: sex and age specific death rates per million living and E.A.D.R. (ages 0-64). England and Wales; Rates for 1940-44 and 1945 to 1952 expressed as percentages of the corresponding average rate over the period 1936-39

	1936–1939	1940–1944	1945	1946	1947	1948	1949	1950	1951	1952
	Males									
Crude Death Rate (all ages)	**100**	107	*113*	*115*	*118*	*120*	*122*	*126*	*130*	*132*
E.A.D.R. (ages 0–64) ..	**100**	*102*	*107*	*108*	*110*	*112*	*112*	*115*	*118*	*119*
0–	**100**	*102*	*110*	*97*	*130*	*117*	*135*	*123*	*126*	*151*
5–	**100**	*120*	*112*	*131*	*127*	*127*	*125*	*122*	*145*	*137*
15–	**100**	*96*	*101*	*111*	*111*	*107*	*120*	*118*	*107*	*120*
25–	**100**	*97*	*108*	*105*	*109*	*97*	*103*	*101*	*101*	*104*
35–	**100**	*107*	*110*	*114*	*118*	*114*	*111*	*109*	*118*	*112*
45–	**100**	*105*	*111*	*117*	*116*	*119*	*117*	*123*	*124*	*124*
55–	**100**	*100*	*105*	*104*	*107*	*110*	*110*	*112*	*116*	*119*
65–	**100**	*101*	*101*	*100*	*103*	*105*	*106*	*105*	*108*	*108*
75 and over	**100**	*98*	*96*	*99*	*102*	*102*	*106*	*110*	*114*	*115*
	Females									
Crude Death Rate (all ages)	**100**	*104*	*106*	*109*	*110*	*110*	*111*	*113*	*112*	*113*
E.A.D.R. (ages 0–64) ..	**100**	*98*	*96*	*97*	*95*	*95*	*93*	*93*	*91*	*92*
0–	**100**	*106*	*123*	*120*	*138*	*123*	*161*	*145*	*155*	*156*
5–	**100**	*114*	*128*	*119*	*117*	*114*	*125*	*156*	*136*	*156*
15–	**100**	*95*	*97*	*95*	*98*	*100*	*111*	*94*	*103*	*103*
25–	**100**	*105*	*105*	*103*	*102*	*97*	*103*	*107*	*104*	*93*
35–	**100**	*96*	*95*	*96*	*95*	*91*	*93*	*92*	*96*	*95*
45–	**100**	*99*	*95*	*96*	*95*	*94*	*92*	*91*	*89*	*90*
55–	**100**	*98*	*96*	*96*	*94*	*95*	*93*	*93*	*90*	*92*
65–	**100**	*97*	*95*	*96*	*95*	*95*	*95*	*94*	*92*	*91*
75 and over	**100**	*95*	*93*	*95*	*100*	*98*	*100*	*103*	*100*	*100*

* Up to and including 1948: 5th Revision (Nos. 45–55 together with Hodgkin's Disease (44b) and Leukæmia and Aleukæmia (74)). 1949–1952: 6th Revision (Nos. 140–205).

Table LXXVIII.—Deaths from malignant tumour (I.S.C. Nos. 140-199) by sex and age according to histological type 1952

		All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over
All malignant tumours ..	M	43,120	114	99	149	387	1,603	5,752	10,924	14,036	8,962	1,094
	F	40,482	97	81	104	426	2,201	5,590	9,123	11,859	9,067	1,934
Carcinoma	M	39,955	25	13	61	253	1,339	5,218	10,183	13,322	8,516	1,025
	F	37,615	20	10	45	341	1,973	5,132	8,460	11,193	8,628	1,813
Sarcoma	M	888	54	45	58	70	89	142	168	167	82	13
	F	934	50	34	41	52	90	157	204	179	105	22
Glioma	M	671	27	36	23	41	116	190	196	38	4	—
	F	429	19	29	16	22	67	105	117	45	7	2
Cancer undefined ..	M	1,606	8	5	7	23	59	202	377	509	360	56
	F	1,504	8	8	2	11	71	196	342	442	327	97

Table LXXIX.—Cancer (6th Revision, Nos. 140-205): death rates per million living by sex and age from cancer at various sites. England and Wales, 1952—Males

Int. Classn. No. (6th Revision)	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over
140	Lip											
141	Tongue											
142	Salivary gland	44	—	*1*	*1*	*1*	*3*	18	75	234	622	631
143	Floor of mouth											
144	Other parts of mouth and mouth unspecified											
145	Oral mesopharynx											
146	Nasopharynx	26	—	*1*	*3*	*0*	*5*	16	50	142	270	338
147	Hypopharynx											
148	Pharynx unspecified											
150	Œsophagus	70	—	—	—	*0*	7	39	148	370	843	862
151	Stomach	382	—	—	*3*	14	80	378	978	2,009	3,079	2,523
152	Small intestine, including duodenum	202	—	*1*	*1*	14	46	122	365	1,087	2,326	2,738
153	Large intestine, except rectum											
154	Rectum	162	—	*0*	*1*	*6*	26	97	326	889	1,796	2,031
155	Biliary passages and of liver (stated to be primary site)	25	—	—	*0*	*2*	*6*	22	63	131	222	215
157	Pancreas	82	—	—	—	*3*	17	67	215	441	674	646
161	Larynx	36	—	*0*	—	*0*	*4*	21	90	198	353	338
162	Trachea, and of bronchus and lung specified as primary	568	*1*	—	*5*	25	179	843	2,142	2,514	1,623	1,046
163	Lung and bronchus, unspecified as to whether primary or secondary											
170	Breast	3	—	—	—	—	*1*	*3*	*6*	*14*	*20*	*62*
177	Prostate	142	—	*0*	*1*	—	*2*	18	161	879	2,207	2,754
178	Testis	10	*2*	—	7	13	15	11	10	19	*25*	*15*
179	Other and unspecified male genital organs	7	—	—	—	*1*	*1*	*5*	13	33	97	*92*
180	Kidney	120	15	*3*	*1*	*3*	24	102	284	635	1,025	1,123
181	Bladder and other urinary organs											
190	Skin (malignant melanoma)	23	*1*	*0*	*2*	*4*	*6*	17	31	103	265	662
191	Skin (other malignant neoplasm)											

Table LXXIX.—*continued*

Int. Classn. No. (6th Revision)	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over
193	Malignant neoplasm of brain and other parts of nervous system	39	22	13	11	17	42	76	117	46	*11*	*15*
194	Thyroid gland	5	—	—	—	*0*	*2*	*6*	11	25	40	—
195	Other endocrine glands	4	*9*	*2*	*0*	*2*	*2*	*4*	*7*	*7*	*2*	*15*
196 197	Bone (including jaw bone) Connective tissue	24	*7*	7	16	10	9	26	42	94	141	*169*
158 164 198	Peritoneum Mediastinum Secondary and unspecified malignant neoplasm of lymph nodes	13	*2*	*1*	*1*	*3*	*6*	13	42	56	47	*31*
200	Lymphosarcoma and reticulosarcoma	21	*4*	*4*	8	9	11	26	51	83	88	*46*
201	Hodgkin's disease	23	*2*	*2*	14	26	23	32	45	49	36	*46*
202	Other forms of lymphoma (reticulosis)	4	*1*	*1*	*0*	*2*	*4*	*6*	10	15	*9*	—
203	Multiple myeloma (plasmocytoma)	8	—	—	*0*	*1*	*3*	12	27	31	*20*	—
204	Leukæmia and aleukæmia	52	60	32	24	21	29	44	96	166	189	*108*
205	Mycosis fungoides	1	—	—	—	—	*1*	*1*	*3*	*3*	*5*	—
Others in 140–205	Remaining sites	56	*6*	*2*	*1*	*4*	16	48	150	267	459	523
140–205	**Total**	**2,152**	**130**	**70**	**102**	**182**	**568**	**2,073**	**5,562**	**10,540**	**16,495**	**17,031**
193 223 237	Malignant neoplasm of brain and other parts of nervous system Benign neoplasm of brain and other parts of nervous system Neoplasm of unspecified nature of brain and other parts of nervous system	63	28	21	18	26	61	117	185	94	*29*	*15*

Table LXXX.—Cancer (6th Revision, Nos. 140-205); death rates per million living by sex and age from cancer at various sites. England and Wales, 1952—Females

Int. Classn. No. (6th Revision)	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over
140 141 142 143 144	Lip Tongue Salivary glands Floor of mouth Other parts of mouth and mouth unspecified	14	—	*0*	*1*	*1*	*3*	9	23	56	100	128
145 146 147 148	Oral mesopharynx Nasopharynx Hypopharynx Pharynx unspecified	14	*1*	*0*	*0*	*2*	8	17	35	48	62	47
150	Œsophagus	37	—	—	—	*1*	10	22	63	160	262	338
151	Stomach	278	*1*	—	*1*	10	52	165	443	1,158	2,181	2,486
152 153	Small intestine, including duodenum Large intestine, except rectum	252	—	—	*1*	12	45	153	404	916	2,097	3,149
154	Rectum	105	—	—	*1*	*4*	27	74	193	390	781	912
155	Biliary passages and of liver (stated to be primary site)	35	—	*1*	*1*	*1*	*5*	24	71	154	228	135
157	Pancreas	68	—	—	*0*	*1*	9	40	126	285	506	642
161	Larynx	8	*1*	—	—	*1*	*4*	11	16	28	44	*20*
162 163	Trachea and of bronchus and lung specified as primary Lung and bronchus, unspecified as to whether primary or secondary	98	—	—	*1*	7	40	107	253	344	438	324
170	Breast	363	—	—	*1*	30	217	513	791	1,114	1,579	2,088
171	Cervix uteri	111	*1*	—	*1*	16	79	173	289	306	359	277
172 173 174	Corpus uteri Other parts of uterus, including chorione-pithelioma Uterus unspecified	65	*1*	—	*1*	*2*	16	72	155	240	321	324
175	Ovary, Fallopian tube and broad ligament	110	—	*1*	*5*	13	59	209	285	298	280	277
176	Other and unspecified female genital organs	21	*2*	*0*	—	*1*	*5*	9	26	86	170	270

Table LXXX.—*continued*

Int. Classn. No. (6th Revision)	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over
180 181	Kidney Bladder and other urinary organs	53	19	*4*	—	*3*	12	35	94	192	384	466
190 191	Skin (malignant melanoma) Skin (other malignant neoplasm)	21	*1*	*1*	*2*	7	11	13	30	52	140	493
193	Brain and other parts of nervous system	23	16	12	*6*	8	24	40	55	31	*10*	*14*
194	Thyroid gland	11	—	—	—	*0*	*3*	8	22	48	70	*95*
195	Other endocrine glands	2	*5*	*1*	*0*	*2*	*2*	*2*	*3*	*4*	*3*	*7*
196 197	Bone (including jaw bone) Connective tissue	18	*4*	*5*	10	7	9	17	32	57	70	68
158 164 198	Peritoneum Mediastinum Secondary and unspecified neoplasm of lymph nodes	13	*3*	*1*	*2*	*2*	*5*	13	32	52	47	*41*
200	Lymphosarcoma and reticulosarcoma	13	*1*	*5*	*4*	7	8	10	23	42	42	*14*
201	Hodgkin's disease	12	*1*	*2*	8	16	10	10	20	28	29	*7*
202	Other forms of lymphoma (reticulosis)	2	*2*	—	*0*	*1*	*1*	*2*	*5*	*7*	*2*	—
203	Multiple myeloma (plasmocytoma)	8	—	*0*	—	*0*	*3*	8	23	36	*12*	*20*
204	Leukæmia and aleukæmia	41	42	23	17	13	25	38	69	101	140	*61*
205	Mycosis fungoides	*0*	—	—	—	—	*0*	*0*	*0*	*1*	*1*	—
Others in 140–205	Remaining sites	52	*4*	*0*	*1*	*3*	17	43	100	190	324	466
140–205	**Total**	**1,848**	**103**	**56**	**66**	**170**	**709**	**1,836**	**3,680**	**6,424**	**10,683**	**13,169**
193 223 237	Malignant neoplasm of brain and other parts of nervous system Benign neoplasm of brain and other parts of nervous system Neoplasm of unspecified nature of brain and other parts of nervous system	42	23	19	14	16	38	70	100	65	31	*27*

Table LXXXI.—Cancer of different sites: Death rates per million living by sex and age. England and Wales, 1911-20, 1921-30, 1931-35 and 1936 to 1952

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
ALL SITES* (I.S.C. Nos. 140–205)																						
1911–20	Not available				57	424	1,665	4,333	1,019	7,691	9,208	Not available				64	787	2,222	4,257	1,152	6,786	8,512
1921–30					60	420	1,618	4,666	1,064	9,063	11,994					67	762	2,115	4,172	1,121	7,220	10,236
1931–35					62	446	1,678	4,601	1,059	9,760	13,486					68	732	2,048	4.010	1,081	7,167	10,978
1936	89	52	85	165	99	496	1,664	4,725	1,113	9,844	14,569	63	32	67	189	91	766	2,061	4,010	11,01	7,172	11,154
1937	86	47	86	186	103	515	1,653	4,716	1,115	9,879	14,258	57	38	61	178	87	725	2,052	3,951	1,082	7,114	10,865
1938	84	54	90	175	103	518	1,682	4,691	1,116	9,892	14,316	69	38	70	179	92	750	2,058	4,085	1,110	7,039	10,937
1939	87	50	79	174	99	491	1,690	4,637	1,102	9,555	14,550	73	36	60	183	90	735	2,024	3,951	1,081	7,035	11,119
1940	87	58	80	164	99	535	1,743	4,737	1,132	9,821	14,812	76	39	59	182	91	716	2,055	3,949	1,083	7,145	10,779
1941	100	59	77	187	107	540	1,724	4,728	1,133	9,921	14,312	64	41	59	193	93	719	2,046	3,887	1,073	6,899	10,618
1942	79	64	83	162	100	547	1,764	4,684	1,130	10,056	13,907	74	40	60	193	94	719	2,019	3,934	1,077	6,935	10,335
1943	94	63	83	169	103	536	1,790	4,689	1,135	9,991	14,282	59	43	68	200	97	712	2,004	3,904	1,071	6,842	10,474
1944	78	60	87	164	100	552	1,789	4,716	1,140	9,742	13,613	75	43	60	191	95	703	2,001	3,868	1,062	6,665	10,081
1945	95	57	86	189	108	557	1,856	4,908	1,185	9,864	13,757	81	46	62	191	97	705	1,937	3,923	1,047	6,732	10,274
1946	83	67	94	184	110	574	1,956	4,858	1,196	9,799	14,285	79	43	61	188	95	715	1,977	3,848	1,057	6,808	10,493
1947	112	65	94	190	116	594	1,940	5,024	1,225	10,071	14,645	91	42	63	186	96	707	1,941	3,778	1,040	6,769	10,965
1948	101	65	91	169	107	574	1,995	5,142	1,244	10,246	14,732	81	41	64	177	92	674	1,936	3,780	1,033	6,715	10,825
1949	116	64	102	180	115	559	1,964	5,140	1,241	10,362	15,238	106	45	71	188	102	689	1,889	3,704	1,021	6,757	11,001
1950	106	62	100	177	112	549	2,066	5,275	1,274	10,324	15,820	96	56	60	194	102	685	1,863	3,706	1,017	6,695	11,308
1951	108	74	91	177	113	595	2,068	5,446	1,308	10,591	16,358	102	49	66	190	102	711	1,814	3,608	998	6,489	11,036
1952	130	70	102	182	120	568	2,073	5,562	1,326	10,540	1,6552	103	56	66	170	98	709	1,836	3,680	1,011	6,424	11,045
ALL SITES* LESS LUNG, BRONCHUS AND PLEURA (I.S.C. Nos. 140–161, 162 part, 164, 165 part, 170–205)																						
1911–20	Not available				54	411	1,631	4,269	1,000	7,615	9,166	Not available				63	779	2,202	4,223	1,142	6,744	8,484
1921–30					57	391	1,545	4,538	1,027	8,927	11,902					66	752	2,090	4,122	1,107	7,160	10,185
1931–35					57	377	1,401	4,251	958	9,413	13,247					66	714	2,001	3,916	1,055	7,043	10,873
1936	88	51	82	151	94	414	1,378	4,229	977	9,345	14,246	63	32	66	183	89	742	1,999	3,896	1,069	7,016	11,030
1937	86	46	83	159	94	423	1,331	4,174	963	9,367	13,897	56	37	59	172	84	708	1,993	3,836	1,051	6,958	10,714
1938	82	53	85	150	94	412	1,317	4,060	942	9.293	13,890	69	38	68	174	90	725	2,000	3,954	1,076	6,855	10,772
1939	87	50	76	149	91	375	1,318	3,994	924	8,917	14,140	73	36	58	176	87	706	1,961	3,819	1,045	6,829	10,946
1940	86	58	76	144	92	414	1,356	4,021	940	9,165	14,369	76	38	57	174	88	693	1,987	3,808	1,046	6,940	10,599
1941	100	58	74	159	98	420	1,308	3,939	924	9,249	13,922	64	41	58	184	90	696	1,978	3,755	1,037	6,705	10,448
1942	78	64	80	140	93	412	1,322	3,816	904	9,282	13,404	72	40	58	186	91	691	1,949	3,792	1,039	6,718	10,154
1943	94	62	79	145	95	410	1,303	3,753	892	9,070	13,708	58	41	65	190	93	681	1,931	3,772	1,032	6,632	10,289
1944	77	60	84	140	92	411	1,260	3,697	876	8,789	13,053	75	43	58	183	92	671	1,919	3,714	1,019	6,465	9,886
1945	94	56	82	161	98	414	1,300	3,791	900	8,813	13,184	80	46	61	180	93	676	1,858	3,654	1,002	6,493	10,073
1946	83	67	89	162	102	414	1,317	3,629	880	8,615	13,580	79	43	58	181	92	682	1,900	3,679	1,013	6,547	10,255
1947	111	65	88	165	107	421	1,237	3,648	874	8,683	13,845	91	41	61	174	92	675	1,854	3,588	990	6,483	10,688
1948	101	64	85	136	96	411	1,258	3,622	866	8,657	13,854	80	40	63	169	89	640	1,827	3,589	980	6,404	10,552
1949	115	63	95	156	106	402	1,217	3,503	845	8,520	14,214	105	44	70	178	98	649	1,798	3,498	967	6,419	10,711
1950	105	62	96	148	102	384	1,244	3,438	834	8,297	14,615	96	56	58	186	99	643	1,756	3,492	960	6,351	10,972
1951	107	74	87	155	105	418	1,213	3,482	843	8,242	14,981	100	49	64	179	98	672	1,714	3,388	941	6,138	10,658
1952	129	70	98	157	112	389	1,232	3,417	835	8,023	1,4994	103	56	65	163	96	670	1,728	3,426	948	6,077	10,623

* Excludes Hodgkin's disease, Leukæmia and Aleukæmia 1911–35

Table LXXXI.—*continued*

Period	Males											Females									
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
LIPS (I.S.C. No. 140)																						
1911–20	Not available				*0*	2	10	38	8	108	335	Not available				*0*	*0*	1	2	0	5	21
1921–30					*0*	1	7	36	7	104	297					*0*	*0*	*1*	2	0	6	19
1931–35					*0*	*1*	7	27	5	90	281					*0*	*0*	*0*	*1*	0	5	15
1936	—	—	*0*	—	*0*	*0*	*3*	21	4	87	251	—	—	—	—	—	—	—	*1*	*0*	*6*	*13*
1937	—	—	—	—	—	*1*	*3*	23	4	74	245	—	—	—	—	—	—	*0*	*0*	*0*	*4*	*18*
1938	—	—	—	*0*	*0*	*0*	*5*	24	4	61	240	—	—	—	—	—	—	*1*	*1*	*0*	*2*	*28*
1939	—	—	—	—	—	*1*	*5*	18	4	71	244	—	—	—	—	—	*0*	—	*2*	*0*	*4*	*17*
1940	*1*	—	—	—	*0*	*1*	*2*	18	3	55	210	—	—	—	—	—	—	*0*	*2*	*0*	*3*	*15*
1941	—	—	—	—	—	*1*	*4*	17	3	72	189	—	—	—	—	—	*0*	—	*1*	*0*	*4*	*7*
1942	—	—	—	*0*	*0*	*1*	*3*	15	3	71	208	—	—	—	—	—	—	*1*	*2*	*0*	*4*	*19*
1943	—	—	—	—	—	*2*	*4*	15	3	61	201	—	—	—	—	—	*0*	*0*	*1*	*0*	*6*	*18*
1944	—	—	*0*	—	*0*	*1*	*3*	12	2	67	165	—	—	—	—	—	*0*	—	*2*	*0*	*2*	*14*
1945	—	—	—	*0*	*0*	—	*1*	10	2	48	178	—	—	—	—	—	—	—	*2*	*0*	*3*	*10*
1946	—	—	—	*0*	*0*	*0*	*2*	16	3	43	174	*1*	—	—	—	*0*	—	—	*2*	*0*	*1*	*13*
1947	—	—	—	—	—	—	*3*	*5*	1	46	125	—	—	—	—	—	—	*1*	*2*	*0*	*4*	*5*
1948	—	—	—	—	—	—	*3*	*5*	*1*	37	122	—	—	—	—	—	—	—	*1*	*0*	*1*	*10*
1949	—	—	—	—	—	*1*	*3*	*6*	2	35	152	—	—	—	—	—	—	—	*0*	*0*	*2*	*15*
1950	—	—	—	—	—	*0*	*2*	*4*	*1*	37	133	—	—	—	—	—	—	—	*0*	*0*	*3*	*7*
1951	—	—	—	—	—	—	*1*	*6*	*1*	31	129	—	—	—	—	—	—	*0*	*0*	*0*	*3*	*4*
1952	—	—	—	—	—	—	*1*	*6*	*1*	17	92	—	—	*0*	—	*0*	—	*0*	—	*0*	*3*	*10*
TONGUE (I.S.C. No. 141)																						
1911–20	Not available				0	19	122	279	65	395	382	Not available				0	4	9	18	5	30	47
1921–30					0	9	81	266	55	411	429					*0*	2	7	17	4	29	51
1931–35					*0*	4	40	195	37	399	439					*0*	2	5	17	4	27	52
1936	—	—	*0*	*0*	*0*	*4*	33	159	30	353	412	—	—	—	*0*	*0*	*1*	8	16	4	41	47
1937	—	—	—	*1*	*0*	*4*	34	153	30	317	479	—	—	—	*0*	*0*	*1*	*5*	17	4	35	47
1938	—	—	*0*	*0*	*0*	*2*	20	141	25	337	416	—	—	—	*1*	*0*	*2*	*6*	17	4	27	38
1939	—	—	—	—	—	*2*	21	114	21	288	465	—	—	*0*	*0*	*0*	*2*	7	13	3	29	35
1940	—	—	—	*0*	*0*	*3*	20	104	20	338	465	—	—	—	*1*	*0*	*2*	*5*	17	4	32	43
1941	—	—	—	—	—	*3*	20	99	19	292	366	—	—	—	*0*	*0*	*2*	*6*	14	3	24	62
1942	—	—	—	*1*	*0*	*2*	15	91	17	300	402	—	—	—	*1*	*0*	*1*	*6*	16	4	31	43
1943	—	—	—	*0*	*0*	*1*	11	80	14	261	443	—	—	—	*1*	*0*	*1*	*6*	18	4	37	55
1944	—	—	*0*	*0*	*0*	*1*	18	81	15	283	351	—	—	—	—	—	*3*	*5*	14	3	29	67
1945	—	—	*1*	*0*	*0*	*3*	16	58	12	233	340	—	—	—	—	—	*2*	7	11	3	24	60
1946	—	—	—	*1*	*0*	*1*	9	54	10	201	366	—	—	—	—	—	*1*	*4*	9	2	29	40
1947	—	—	—	*0*	*0*	*2*	11	49	10	198	386	—	—	*1*	*0*	*0*	*1*	*6*	9	3	25	50
1948	—	—	—	*1*	*0*	*1*	9	51	10	184	339	—	—	—	*0*	*0*	*1*	*6*	10	3	27	46
1949	—	—	—	*0*	*0*	*1*	8	37	7	163	289	—	—	—	*1*	*0*	*1*	*5*	13	3	26	60
1950	—	—	—	—	*0*	*1*	7	46	8	149	330	—	—	—	*1*	*0*	*1*	*4*	11	3	28	50
1951	—	—	—	*1*	*0*	*2*	7	31	6	137	353	—	—	*0*	*1*	*0*	*1*	*3*	14	3	25	56
1952	—	—	—	*0*	*0*	*1*	7	36	7	121	298	—	—	—	*1*	0	*1*	*3*	12	3	24	44

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
MOUTH AND TONSIL* (I.S.C. Nos. 143, 144 and 145 part)																						
1911–20	Not available				1	9	52	127	29	179	204	Not available				0	2	6	13	3	20	37
1921–30					1	7	48	158	33	255	280					0	2	6	16	4	27	41
1931–35					1	4	30	144	28	290	362					0	3	6	15	4	23	51
1936	1	0	1	1	1	4	22	91	18	203	280	—	—	—	1	0	2	5	12	3	27	32
1937	—	—	—	1	0	3	21	88	17	218	245	—	—	1	—	0	2	3	9	2	19	31
1938	—	1	—	1	1	4	14	77	15	212	265	—	—	—	1	0	1	5	8	2	17	33
1939	—	—	0	—	0	1	12	68	12	162	239	—	—	—	0	0	2	4	6	2	19	34
1940	—	1	1	1	1	3	12	54	11	164	284	—	0	—	—	0	2	4	8	2	19	31
1941	—	1	0	0	0	2	10	57	11	150	262	—	—	—	—	—	1	2	7	2	13	33
1942	—	0	—	0	0	2	12	48	10	161	244	—	1	0	0	0	—	3	9	2	18	36
1943	—	—	—	1	0	2	8	45	9	159	235	—	—	0	0	0	2	4	7	2	17	28
1944	—	—	1	—	0	1	10	42	8	140	234	—	—	1	—	0	2	4	6	2	16	25
1945	—	0	—	1	0	2	10	36	8	138	257	—	1	—	1	1	1	4	7	2	21	45
1946	—	—	0	0	0	2	7	26	5	130	220	—	0	—	0	0	1	3	8	2	11	36
1947	—	1	1	1	1	1	7	29	6	117	212	1	0	—	0	0	1	2	6	1	15	28
1948	—	0	—	1	0	2	9	33	7	101	197	—	—	0	—	0	1	4	6	2	13	33
1949	—	0	—	1	0	2	5	25	5	87	208	—	1	0	0	0	1	1	7	2	17	28
1950	—	—	1	0	0	1	9	40	8	111	308	—	—	0	—	0	1	5	12	3	21	49
1951	—	1	0	0	0	1	9	40	8	136	291	—	0	—	0	0	1	5	10	2	25	52
1952	—	—	1	—	0	2	7	30	6	118	287	—	0	—	0	0	2	4	10	2	26	43
PHARYNX (I.S.C. Nos. 145 part, 146–148).																						
1911–20	Not available				1	4	25	60	14	83	74	Not available				0	4	8	14	4	11	17
1921–30					1	4	22	69	15	113	103					0	4	8	12	4	16	21
1931–35					1	3	19	71	15	138	134					0	2	9	15	4	20	22
1936	—	0	2	1	1	1	15	63	13	141	137	—	—	0	1	0	1	11	17	5	23	10
1937	—	1	1	1	1	3	12	55	11	132	174	—	0	1	1	1	1	9	18	5	27	28
1938	—	0	0	1	0	4	11	59	12	148	143	1	—	—	1	0	2	9	15	4	17	20
1939	—	1	2	2	1	3	11	53	11	133	179	—	—	1	1	1	3	8	17	5	24	20
1940	—	0	1	0	0	4	14	49	10	128	144	1	—	0	1	0	2	7	17	4	22	27
1941	1	0	—	1	0	4	12	43	9	115	177	—	1	—	1	0	3	6	14	4	22	25
1942	—	1	1	1	1	3	12	51	11	125	174	—	1	1	1	1	2	6	13	4	23	24
1943	1	0	1	0	0	5	14	44	10	111	144	—	0	1	1	1	4	6	12	4	22	17
1944	—	—	0	2	1	4	11	35	8	97	151	—	—	0	0	0	3	10	14	4	20	19
1945	—	1	1	2	1	4	9	42	9	113	147	1	0	—	1	0	2	8	10	3	18	26
1946	—	1	0	2	1	2	11	36	8	98	144	—	0	1	1	1	1	7	14	4	22	27
1947	—	0	1	1	1	4	11	37	8	92	143	—	—	—	2	1	4	6	17	4	17	28
1948	1	1	1	0	1	4	9	26	6	85	144	—	1	1	1	1	1	6	13	4	22	21
1949	1	1	1	1	1	3	12	28	7	93	145	—	0	0	1	0	3	9	16	4	24	29
1950	—	—	2	0	1	2	14	37	8	103	172	1	0	1	1	1	7	16	35	9	32	48
1951	—	1	0	1	1	5	11	41	9	87	197		0	—	1	0	6	19	26	8	37	44
1952	—	1	3	0	1	3	13	40	9	99	192	1	—	0	2	1	7	15	32	9	39	46

* Includes salivary gland 1911–1935.

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 E A D R	35–	45–	55–	0–64 E A D R	65–	75 and over	0–	5–	15–	25–	0–34 E A D R	35–	45–	55–	0–64 E A D R	65–	75 and over
JAW (I.S.C. No. 196 part)																						
1911–20	Not available				1	10	52	126	29	206	231	Not available				1	6	15	31	9	48	64
1921–30					2	6	33	105	23	178	243					1	4	13	27	7	45	66
1931–35					1	5	19	65	14	149	205					1	3	8	21	5	39	55
1936	*1*	—	*1*	*0*	*0*	*3*	19	64	13	124	191	*1*	*0*	*0*	*1*	*0*	*4*	11	17	5	49	85
1937	*1*	*0*	*1*	*2*	*1*	*3*	17	52	12	121	161	*1*	*0*	*1*	*1*	*1*	*2*	8	19	5	35	63
1938	*3*	—	*1*	*1*	*1*	*5*	14	52	11	101	181	—	—	*0*	*0*	*0*	*4*	9	19	5	41	49
1939	—	*1*	*1*	*2*	*1*	*3*	12	44	10	114	209	*1*	*0*	*1*	*1*	*1*	*3*	8	20	5	39	60
1940	*1*	*0*	*1*	*1*	*1*	*5*	14	57	12	118	176	*1*	—	*1*	*0*	*0*	*2*	*6*	17	4	35	34
1941	*1*	—	*1*	*2*	*1*	*3*	10	34	8	113	154	—	*1*	*1*	*1*	*1*	*1*	*6*	16	4	29	51
1942	*1*	*0*	*0*	*1*	*0*	*2*	*5*	32	6	91	165	—	*0*	*1*	*1*	*1*	*2*	*3*	9	2	20	39
1943	—	*1*	*1*	*1*	*1*	*2*	*6*	21	5	84	140	*1*	—	—	—	*0*	*1*	8	8	3	19	46
1944	—	*0*	*0*	*1*	*0*	*1*	10	30	6	80	173	—	—	*1*	—	*0*	*1*	*3*	8	2	29	37
1945	—	*0*	*1*	*1*	*1*	*2*	*7*	23	5	67	124	—	*0*	—	*0*	*0*	*1*	*3*	*7*	2	20	43
1946	*2*	*1*	*0*	—	*1*	*2*	*4*	19	4	72	125	—	—	*0*	*1*	*0*	*1*	*3*	11	2	19	50
1947	*1*	*0*	*1*	*1*	*1*	*2*	*5*	17	4	60	115	*1*	—	—	*1*	*0*	*1*	*3*	9	2	16	34
1948	*1*	—	—	*1*	*0*	2	7	15	4	50	103	—	*0*	*0*	*0*	*0*	*1*	*6*	*6*	2	17	22
1949	—	—	*1*	*1*	*1*	*1*	*5*	12	3	50	106	—	*0*	—	—	*0*	*1*	*3*	*8*	2	13	30
1950	—	—	*0*	*1*	*0*	*1*	*3*	13	3	36	48	—	—	*0*	*0*	*0*	*1*	*2*	*4*	1	*9*	*19*
1951	—	*0*	—	*0*	*0*	*1*	*3*	*9*	2	32	58	*1*	—	—	*1*	*0*	*1*	*2*	*4*	1	*10*	20
1952	*1*	*1*	*1*	*1*	*1*	*1*	*2*	*7*	2	25	55	—	*0*	*0*	*0*	*0*	*1*	*3*	*5*	1	*10*	*16*
ŒSOPHAGUS (I.S.C. No. 150)																						
1911–20	Not available				0	18	139	357	79	510	466	Not available				1	18	43	70	21	105	144
1921–30					0	10	113	384	78	600	623					1	13	45	81	22	133	190
1931–35					0	9	71	341	65	639	737					*0*	9	42	93	22	153	226
1936	—	—	*0*	*1*	*0*	13	61	293	57	628	744	—	—	—	*1*	*0*	9	36	97	22	174	256
1937	*1*	—	*0*	*1*	*0*	9	50	289	54	514	729	—	—	—	*2*	*1*	8	44	88	22	163	208
1938	—	—	*0*	*1*	*0*	10	49	237	46	588	747	*1*	—	*0*	*2*	1	8	31	90	20	149	254
1939	—	—	*1*	*2*	*1*	7	43	243	46	532	794	—	—	—	*1*	*0*	9	37	88	21	155	235
1940	—	—	*0*	*2*	*1*	9	42	248	46	604	680	—	—	—	*0*	*0*	7	36	77	18	157	225
1941	—	—	—	*2*	*1*	7	38	213	40	579	757	—	—	—	*1*	*0*	7	34	69	17	154	244
1942	—	—	—	*2*	*1*	8	39	199	38	571	779	—	—	—	*1*	*0*	7	28	83	18	143	207
1943	—	—	*0*	*2*	*1*	11	43	182	37	527	678	—	—	—	*2*	*1*	7	26	84	18	163	255
1944	—	—	*1*	*2*	*1*	9	42	182	36	511	687	—	—	—	*1*	*0*	*6*	25	78	17	144	207
1945	—	—	*1*	*2*	*1*	12	48	167	35	498	647	—	—	—	*2*	*1*	7	33	79	19	158	230
1946	—	—	—	*1*	*0*	8	42	154	32	462	707	—	—	—	*1*	*0*	6	33	76	18	175	259
1947	—	—	—	*2*	*1*	6	37	169	33	470	830	—	—	—	*1*	*0*	7	30	80	18	150	265
1948	—	—	—	*2*	*1*	7	39	157	32	458	734	—	—	—	*2*	*1*	7	26	79	18	154	255
1949	—	—	*1*	*2*	*1*	6	35	152	30	430	701	—	—	—	*1*	*0*	8	23	70	16	151	253
1950	—	—	—	*0*	*0*	9	46	131	29	444	767	—	—	—	*2*	*1*	8	19	61	14	166	297
1951	—	—	—	*3*	*1*	8	41	158	32	399	770	—	—	—	*2*	*1*	6	20	71	15	164	279
1952	—	—	—	*0*	*0*	7	39	148	30	370	845	—	—	—	*1*	*0*	10	22	63	15	160	273

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
STOMACH AND DUODENUM (I.S.C. Nos. 151, and 152 part)																						
1911–20	Not available				6	96	361	952	220	1,709	1,686	Not available				4	74	255	663	155	1,268	1,457
1921–30					7	114	407	1,067	248	2,040	2,311					5	73	253	681	158	1,489	1,952
1931–35					7	116	425	1,076	253	2,193	2,624					6	71	233	645	149	1,513	2,212
1936	—	—	*2*	22	7	128	435	1,095	259	2,136	2,887	—	*1*	*2*	15	5	77	226	599	142	1,481	2,247
1937	—	*0*	*2*	25	8	116	408	1,076	250	2,155	2,776	—	—	*2*	18	6	68	212	612	140	1,468	2,218
1938	—	—	*3*	19	6	108	425	1,110	256	2,127	2,658	—	—	*2*	14	5	70	221	615	142	1,440	2,292
1939	—	—	*3*	19	6	105	428	1,076	251	2,173	2,694	—	—	*1*	19	6	65	227	630	145	1,398	2,208
1940	—	*0*	*1*	17	5	111	426	1,103	255	2,163	3,083	—	—	*2*	23	7	60	215	589	137	1,467	2,218
1941	—	*1*	*1*	23	7	113	403	1,098	252	2,174	2,714	*1*	*1*	*2*	19	6	57	215	612	139	1,366	2,104
1942	—	—	*2*	14	5	111	419	1,043	244	2,076	2,438	—	—	*1*	19	6	70	203	567	132	1,260	1,924
1943	*1*	—	*3*	18	6	106	396	1,013	236	1,988	2,458	—	—	*2*	18	6	65	195	562	130	1,273	1,963
1944	—	—	*2*	20	6	119	386	1,053	243	2,047	2,476	—	*0*	*2*	19	6	57	201	572	131	1,254	1,954
1945	—	—	*2*	22	7	110	389	1,084	247	2,099	2,515	—	—	*1*	15	5	64	182	542	124	1,271	1,961
1946	—	—	*3*	16	5	109	389	1,028	238	2,016	2,696	—	—	*2*	12	4	70	197	534	125	1,315	2,102
1947	—	—	*2*	17	5	109	397	1,060	244	2,101	2,630	—	—	*1*	12	4	57	184	540	122	1,317	2,119
1948	—	*0*	*3*	16	5	106	383	1,095	247	2,170	2,755	—	—	*1*	16	5	58	167	506	115	1,254	2,199
1949	—	—	*1*	19	6	97	360	1,035	233	2,152	2,809	—	—	*1*	14	4	53	170	465	108	1,233	2,158
1950	—	*0*	*4*	17	6	99	367	958	222	2,096	2,898	—	*0*	*1*	16	5	51	162	460	106	1,256	2,361
1951	—	—	*2*	14	5	92	357	1,025	229	2,107	3,033	*1*	—	*4*	12	5	55	161	450	105	1,222	2,396
1952	—	—	*3*	14	5	80	379	981	224	2,019	3,042	*1*	—	*1*	10	3	53	166	444	104	1,164	2,237
INTESTINE EXCEPT RECTUM AND DUODENUM (I.S.C. Nos. 152 part, and 153)																						
1911–20	Not available				4	44	145	423	96	901	1,154	Not available				4	50	179	469	110	982	1,358
1921–30					4	44	153	508	111	1,237	1,840					4	51	180	506	116	1,198	2,006
1931–40					5	44	160	520	114	1,384	2,248					5	59	185	498	117	1,266	2,398
1936	—	*0*	*2*	16	5	49	155	563	121	1,446	2,469	—	—	*3*	19	6	65	191	499	120	1,198	2,475
1937	—	—	*0*	14	4	44	153	556	118	1,484	2,332	—	*0*	*1*	16	5	69	209	522	126	1,235	2,460
1938	—	*1*	*6*	11	5	54	159	530	117	1,409	2,551	—	—	*3*	20	7	59	183	519	121	1,273	2,391
1939	*1*	—	*3*	16	6	45	151	529	115	1,389	2,507	—	—	*2*	18	6	61	207	495	120	1,232	2,489
1940	*1*	*0*	*6*	14	6	51	167	543	120	1,429	2,582	*1*	*1*	*2*	15	5	60	202	494	119	1,274	2,404
1941	*1*	*1*	*2*	16	6	47	154	537	117	1,419	2,409	—	*0*	*2*	14	5	65	199	476	116	1,251	2,462
1942	—	*1*	*3*	13	5	50	163	511	114	1,416	2,361	—	*0*	*2*	16	5	59	175	499	116	1,185	2,298
1943	*1*	*1*	*3*	10	4	52	155	544	118	1,450	2,345	*1*	—	*2*	22	7	59	194	495	119	1,145	2,361
1944	*1*	*1*	*4*	14	6	52	140	492	108	1,399	2,369	*1*	*0*	*2*	16	5	53	193	503	118	1,161	2,293
1945	*1*	*1*	*3*	18	6	47	157	504	112	1,433	2,444	—	—	*4*	14	5	74	191	490	119	1,147	2,192
1946	*1*	*1*	*4*	19	7	53	165	498	114	1,387	2,396	—	*0*	*3*	16	5	65	181	483	115	1,163	2,382
1947	*1*	*1*	*5*	16	6	49	144	478	107	1,376	2,505	—	*0*	*2*	13	4	58	199	451	111	1,153	2,467
1948	*1*	*1*	*5*	15	6	46	147	432	99	1,294	2,440	—	—	*4*	14	5	49	186	457	109	1,066	2,292
1949	*1*	*1*	*2*	10	4	49	148	422	97	1,246	2,377	*1*	—	*2*	11	4	56	184	460	110	1,048	2,329
1950	—	*0*	*2*	13	4	41	129	391	89	1,151	2,364	—	*0*	*2*	11	4	57	163	417	100	990	2,389
1951	—	*0*	*3*	13	5	45	128	370	86	1,141	2,358	*1*	*1*	*1*	14	5	53	153	380	93	916	2,172
1952	—	*1*	*1*	14	5	46	121	361	84	1,077	2,348	—	—	*1*	12	4	45	152	402	94	910	2,238

Table LXXXI.—*continued*

Period	Males											Females									
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
RECTUM* (I.S.C. No. 154)																						
1911–20	Not available				4	37	142	445	98	895	1,113	Not available				3	36	111	260	64	509	647
1921–30					4	31	143	483	103	1,057	1,421					4	32	98	253	61	513	778
1931–40					4	35	135	481	102	1,165	1,570					4	31	87	239	57	511	791
1936	—	—	*2*	11	4	31	130	464	98	1,184	1,574	—	—	*2*	10	3	31	89	233	56	488	786
1937	—	—	*3*	13	5	38	120	476	100	1,167	1,695	*1*	*0*	*2*	11	4	33	94	230	57	504	754
1938	—	—	*3*	13	5	33	121	495	102	1,203	1,732	—	*0*	*3*	11	4	36	105	230	59	479	807
1939	—	—	*2*	12	4	32	123	492	102	1,120	1,811	—	—	*3*	9	3	29	90	214	53	496	743
1940	—	—	*3*	12	4	34	134	464	100	1,187	1,748	—	—	*2*	9	3	32	102	220	56	502	832
1941	*1*	—	*4*	15	6	43	128	476	103	1,207	1,740	—	—	*2*	12	4	29	96	232	57	497	856
1942	—	—	*2*	11	4	37	116	458	96	1,267	1,731	—	—	*2*	11	4	38	104	240	61	528	804
1943	—	—	*2*	11	4	35	121	447	95	1,243	1,771	—	—	*3*	12	4	35	94	235	58	506	817
1944	*1*	*0*	*2*	9	3	39	129	439	95	1,168	1,714	—	—	*1*	8	3	30	97	230	56	478	760
1945	—	—	*1*	14	4	39	137	457	100	1,208	1,697	—	—	*2*	11	4	31	96	224	56	498	814
1946	—	—	*2*	8	3	34	114	433	91	1,155	1,836	—	—	*1*	9	3	27	96	222	55	482	823
1947	—	—	*2*	11	4	35	117	412	89	1,110	1,824	—	—	*1*	11	3	29	88	226	55	470	869
1948	—	—	*2*	9	3	36	118	402	87	1,165	1,784	—	—	*1*	8	3	27	87	221	53	466	870
1949	—	—	*3*	7	3	29	105	366	78	1,096	1,846	—	—	*2*	6	2	26	100	197	51	488	873
1950	—	—	*1*	7	2	29	108	388	82	1,017	1,766	—	—	*1*	7	2	21	79	203	48	449	893
1951	—	—	*3*	*6*	3	35	101	356	77	977	1,853	—	—	*2*	*6*	2	27	74	192	46	433	777
1952	—	*0*	*1*	*6*	2	26	97	326	70	889	1,821	—	—	*1*	*4*	*1*	27	74	193	46	390	800
LIVER (I.S.C. Nos. 155 part and 156)																						
1911–20	Not available				3	33	144	420	93	822	987	Not available				3	38	160	472	105	920	1,104
1921–30					2	19	85	264	58	609	859					2	20	82	256	56	595	896
1931–35					2	16	55	180	40	449	654					1	13	49	140	32	365	611
1936	*1*	*1*	*1*	*3*	*2*	11	58	150	35	372	606	*2*	*1*	*1*	*4*	2	16	47	116	29	305	550
1937	*1*	—	*1*	*2*	*1*	9	51	150	33	350	561	*1*	—	*1*	*1*	*1*	12	39	114	26	274	478
1938	*2*	*0*	*1*	*3*	*1*	10	45	128	29	339	487	*1*	*1*	*1*	*1*	*1*	13	36	116	26	254	496
1939	—	*0*	*1*	*3*	*1*	13	49	146	33	280	495	*2*	*0*	*1*	*4*	2	12	35	103	24	246	439
1940	*3*	*1*	—	*2*	*1*	11	44	123	28	310	474	*1*	—	*1*	*2*	*1*	12	37	113	25	235	419
1941	—	*1*	—	*4*	*1*	12	45	139	31	279	456	*2*	—	*1*	*2*	*1*	10	34	96	22	234	444
1942	—	—	*0*	*3*	*1*	10	46	124	28	300	467	*3*	*1*	*0*	*1*	*1*	14	34	91	22	246	409
1943	*3*	*0*	*0*	*2*	*1*	15	46	130	30	323	492	*1*	—	*1*	*2*	*1*	7	38	101	23	218	416
1944	*1*	*1*	*2*	*2*	*2*	10	45	125	29	298	415	*1*	*1*	—	*4*	*2*	12	32	94	22	210	366
1945	*3*	*0*	*1*	*2*	*1*	7	40	130	28	284	429	*1*	*1*	*0*	*2*	*1*	6	26	88	19	208	361
1946	*1*	—	*1*	*4*	*2*	9	48	107	26	274	375	*1*	—	*0*	*2*	*1*	9	25	79	18	182	333
1947	*1*	*0*	*1*	*2*	*1*	11	34	108	24	258	339	*1*	—	*1*	*4*	*2*	10	25	69	17	158	314
1948	*1*	*0*	*1*	*2*	*1*	9	35	101	23	208	362	*1*	—	—	*2*	*1*	7	26	68	16	161	297
1949	*2*	—	*1*	*3*	*1*	6	31	85	20	199	328	*1*	—	*1*	*3*	*1*	8	19	55	13	138	296
1950	*2*	*1*	*1*	*2*	*1*	8	36	82	20	191	292	*1*	*0*	—	*1*	*0*	8	21	57	13	125	237
1951	*2*	*0*	*0*	*1*	*1*	7	30	83	19	193	293	*1*	*1*	*1*	*2*	*1*	6	21	51	13	112	214
1952	*1*	*1*	*1*	*2*	*1*	10	26	87	20	171	311	*1*	*1*	*1*	*1*	*1*	7	17	43	11	103	193

* Includes Anus 1911–30.

Table LXXXI. —*continued*

Period	Males											Females									
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
GALL BLADDER AND DUCTS (I.S.C. No. 155 part)																						
1911–20	Not available				0	2	10	20	6	59	83	Not available				0	3	19	58	12	113	132
1921–30					0	3	10	34	7	90	155					0	4	22	75	16	166	243
1931–40					0	2	11	40	8	95	174					0	4	21	72	15	176	260
1936	—	—	—	1	0	2	9	39	8	94	181	—	—	—	—	—	4	22	76	16	140	269
1937	—	—	—	1	0	2	16	33	8	94	163	—	—	—	1	0	2	20	69	14	162	185
1938	—	—	1	0	0	1	12	34	7	88	194	—	—	—	0	0	3	18	71	14	143	237
1939	1	—	—	0	0	3	10	33	7	90	119	—	—	—	0	0	4	16	60	12	140	231
1940	—	—	—	0	0	3	8	36	7	83	166	—	—	—	—	—	3	17	55	12	129	215
1941	—	—	—	0	0	1	6	29	6	80	125	—	—	—	1	0	3	23	59	13	137	176
1942	—	—	—	1	0	2	12	30	7	83	151	—	—	—	0	0	5	16	57	12	141	218
1943	1	—	—	2	1	2	13	38	9	81	146	—	—	—	1	0	5	17	48	11	134	70
1944	—	—	—	1	0	3	10	31	7	91	141	—	—	—	1	0	5	16	61	13	131	199
1945	—	—	—	—	—	4	8	38	8	80	110	—	—	—	1	0	4	19	55	12	126	188
1946	—	—	—	1	0	2	13	32	7	81	114	—	—	—	0	0	4	20	51	12	109	168
1947	1	—	—	0	0	3	12	35	8	76	88	—	—	—	1	0	2	14	53	11	115	173
1948	—	—	—	0	0	2	9	31	6	79	120	—	—	—	1	0	2	19	52	11	116	173
1949	—	—	—	—	—	3	12	36	8	71	130	—	—	—	0	0	3	20	55	12	129	175
1950	1	—	—	0	0	2	13	30	7	88	138	—	—	—	0	0	3	19	58	12	154	189
1951	—	—	—	1	0	2	14	33	8	79	142	—	—	0	—	0	4	14	52	11	139	213
1952	—	—	—	1	0	3	12	41	9	94	165	—	—	—	1	0	3	19	59	13	132	191
PANCREAS (I.S.C. No. 157)																						
1911–20	Not available				1	10	36	88	21	128	127	Not available				1	7	26	68	16	109	111
1921–30					1	15	53	132	31	223	253					1	9	34	100	23	170	214
1931–35					1	14	62	148	35	300	381					1	10	38	113	25	224	290
1936	—	—	—	5	1	13	58	167	37	332	499	—	—	1	2	1	8	47	122	28	237	333
1937	—	1	0	1	1	17	62	173	39	322	461	1	—	0	1	0	8	35	116	25	244	385
1938	—	—	1	4	1	17	56	154	36	298	449	—	—	1	3	1	8	42	124	27	234	369
1939	—	0	—	1	0	12	67	161	37	344	488	1	—	0	2	1	8	43	119	27	259	349
1940	—	—	—	2	1	15	67	162	38	330	462	—	—	0	1	0	10	35	116	25	247	337
1941	—	—	0	3	1	13	64	167	38	340	518	—	—	0	3	1	8	36	110	24	233	328
1942	—	—	1	2	1	18	63	162	38	331	456	—	—	0	2	1	8	39	120	26	247	330
1943	—	—	0	3	1	16	57	167	37	346	483	—	—	0	2	1	7	33	117	24	251	315
1944	—	—	0	2	1	14	63	177	39	340	514	—	—	0	3	1	10	39	105	24	223	307
1945	—	—	—	3	1	14	66	166	38	336	473	—	—	0	2	1	10	41	102	24	267	389
1946	—	—	1	1	1	13	69	175	40	364	534	—	—	—	0	0	13	38	127	27	265	356
1947	—	—	0	6	2	18	57	183	41	377	511	—	—	0	2	1	8	34	107	23	254	393
1948	—	—	0	3	1	15	65	181	41	359	623	—	—	1	3	1	8	40	126	27	255	435
1949	—	—	—	1	0	14	68	201	44	395	554	1	—	1	2	1	8	38	127	27	263	445
1950	—	—	0	4	1	13	68	189	42	378	670	—	—	—	1	0	9	32	138	28	286	447
1951	—	—	—	3	1	20	64	212	46	388	656	—	—	1	1	1	6	42	110	25	272	430
1952	—	—	—	3	1	17	67	215	46	441	671	—	—	0	1	0	9	40	126	27	285	526

Table LXXXI.—*continued*

Period	Males											Females									
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
PERITONEUM, MESENTERY (I.S.C. No. 158)																						
1911–20	Not available				1	5	12	26	7	42	37	Not available				1	10	28	57	15	83	100
1921–30					2	6	10	22	7	31	29					1	7	19	39	11	51	53
1931–35					2	5	10	16	6	22	20					1	5	14	26	7	37	30
1936	*6*	*1*	*1*	*2*	2	*4*	*7*	10	4	*17*	*32*	*4*	*0*	*2*	*2*	*2*	*5*	9	28	7	35	*25*
1937	*4*	*0*	*2*	*4*	2	*6*	*6*	14	5	21	*32*	*1*	*0*	*1*	*2*	*1*	5	13	26	7	29	*28*
1938	*1*	*2*	*2*	*3*	2	*5*	*8*	18	6	25	*20*	*1*	*2*	*1*	*1*	*1*	*5*	10	24	7	27	*20*
1939	*5*	*2*	*2*	*3*	3	*3*	8	18	6	27	*12*	*1*	*1*	*1*	*2*	*1*	*6*	11	27	7	30	40
1940	*3*	*2*	*2*	*5*	3	7	11	22	8	27	*15*	*1*	*1*	*2*	*3*	2	7	17	21	8	42	*27*
1941	*6*	*1*	*1*	*3*	2	*6*	13	20	7	35	*38*	*3*	*1*	*2*	*3*	2	7	12	23	8	39	39
1942	*4*	*2*	*2*	*2*	2	*5*	*7*	21	6	32	*32*	*1*	*1*	*2*	*4*	2	*5*	13	21	7	33	38
1943	*3*	*1*	*2*	*2*	2	*4*	10	18	6	29	*11*	*5*	—	*1*	*2*	*2*	*4*	11	23	7	30	30
1944	*1*	*1*	*1*	*3*	2	*6*	*7*	16	5	28	*18*	*2*	*0*	*1*	*2*	*1*	*4*	11	25	7	36	27
1945	*2*	*2*	*2*	*4*	3	*6*	13	19	7	18	*19*	*2*	*1*	*0*	*4*	2	*5*	14	28	8	43	30
1946	*1*	*1*	*3*	*2*	2	*5*	10	24	7	24	*21*	*1*	*1*	*0*	*1*	*1*	*6*	10	20	6	34	*19*
1947	*2*	*2*	*2*	*3*	2	*6*	11	16	6	*13*	*11*	*3*	*1*	*2*	*0*	*1*	8	12	25	8	35	36
1948	*6*	*2*	*0*	*3*	2	*5*	9	19	6	20	40	*1*	*1*	*2*	*2*	*2*	*6*	16	25	8	39	36
1949	*6*	*2*	*1*	*2*	2	*5*	9	26	7	24	*32*	*3*	*0*	*1*	*2*	*1*	*5*	12	22	7	41	38
1950	*4*	*2*	*1*	*2*	2	*3*	9	17	6	27	*23*	*3*	*1*	—	*1*	*1*	*3*	13	18	6	23	26
1951	*4*	*0*	*2*	*1*	*1*	*5*	9	15	5	24	33	*1*	—	*0*	*2*	*1*	*4*	14	15	5	31	29
1952	*2*	*1*	*1*	*1*	*1*	*3*	*5*	19	5	27	*16*	*3*	*1*	*2*	*0*	*1*	*4*	10	24	7	37	33
LARYNX, TRACHEA (I.S.C. Nos. 161, 162 part, 165 part)																						
1911–20	Not available				0	10	61	140	32	191	157	Not available				1	8	20	25	9	24	28
1921–30					0	8	64	185	40	285	242					0	7	23	35	10	38	37
1931–35					*0*	7	49	176	36	295	323					0	7	23	33	10	42	47
1936	—	—	*0*	*0*	*0*	*4*	42	171	33	297	323	—	—	*0*	*1*	*0*	7	25	40	11	47	67
1937	—	—	*1*	*1*	*1*	8	40	155	32	309	379	—	—	—	*1*	*0*	*5*	20	28	8	42	59
1938	—	—	—	*1*	*0*	*5*	37	138	28	316	380	—	—	—	*1*	*0*	*4*	14	42	9	52	53
1939	—	—	*0*	*2*	*1*	*7*	33	151	30	317	393	—	—	*0*	*1*	*0*	*6*	20	43	11	44	64
1940	—	—	—	—	—	8	45	140	30	287	355	—	—	*0*	*2*	1	6	17	38	10	52	46
1941	*1*	—	—	*1*	*0*	*6*	38	128	27	322	352	—	*0*	—	*1*	*0*	*3*	24	34	10	49	51
1942	—	—	*0*	*1*	*0*	*5*	29	130	25	289	291	—	—	—	*1*	*0*	7	19	33	9	40	51
1943	—	—	*0*	*2*	*1*	*5*	36	115	24	257	400	—	—	—	*1*	*0*	*6*	19	36	10	43	67
1944	—	—	—	*1*	*0*	*6*	25	113	22	276	315	—	—	*0*	*1*	*0*	*6*	17	40	10	42	54
1945	—	—	*0*	*1*	*0*	*6*	29	119	24	253	299	—	—	*0*	*1*	*0*	*5*	17	35	9	44	62
1946	—	—	—	*1*	*0*	*5*	33	122	25	251	343	—	—	—	*1*	*0*	*4*	17	34	9	42	51
1947	—	—	*0*	*1*	*0*	*3*	29	103	21	246	310	*1*	—	—	*0*	*0*	*5*	14	37	9	42	74
1948	—	—	—	*1*	*0*	9	34	105	22	252	329	—	—	*0*	*0*	*0*	*4*	15	34	8	50	63
1949	—	—	—	*1*	*0*	*4*	28	108	22	232	345	—	—	*0*	*2*	*1*	*4*	13	34	8	52	56
1940	—	—	—	*0*	*0*	*5*	28	87	18	231	382	—	—	—	*1*	*0*	*3*	12	16	5	31	41
1951	—	—	*0*	*1*	*0*	*3*	25	102	20	218	382	—	—	—	*1*	*0*	*4*	9	20	5	38	44
1952	—	*0*	*0*	*1*	*0*	*5*	23	92	19	198	358	*1*	—	—	*1*	*0*	*4*	11	17	5	29	41

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
LUNG, BRONCHUS, PLEURA (I.S.C. Nos. 162 part, 163 and 165 part)																						
1911–20	Not available				3	13	34	64	19	76	42	Not available				1	8	20	34	10	42	28
1921–30					3	29	73	128	37	136	92					1	10	25	50	14	60	51
1931–35					5	69	217	350	101	347	239					2	18	47	94	26	124	105
1936	*1*	*1*	*3*	14	5	82	286	496	136	499	323	—	*0*	*1*	6	2	24	62	114	32	156	124
1937	—	*1*	*3*	27	9	92	322	542	152	512	361	*1*	*1*	*2*	6	3	17	59	115	31	156	151
1938	*2*	*1*	*5*	25	9	106	365	631	174	599	426	—	*0*	*2*	*5*	2	25	58	131	34	184	165
1939	—	*0*	*3*	25	8	116	372	643	178	638	410	—	—	*2*	7	3	29	63	132	36	206	173
1940	*1*	*0*	*4*	20	7	121	387	716	192	656	443	—	*1*	*2*	8	3	23	68	141	37	205	180
1941	—	*1*	*3*	28	9	120	416	789	209	672	390	—	—	*1*	9	3	23	68	132	36	194	170
1942	*1*	—	3	22	7	135	442	868	226	774	503	*2*	*0*	*2*	7	3	28	70	142	38	217	181
1943	—	*1*	*4*	24	8	126	487	936	243	921	574	*1*	*2*	*3*	10	4	31	73	132	39	210	185
1944	*1*	—	*3*	24	8	141	529	1,019	264	953	560	—	—	*2*	8	3	32	82	154	43	200	195
1945	*1*	*1*	*4*	28	10	143	556	1,117	285	1,051	573	*1*	*0*	*1*	11	4	29	79	169	45	239	201
1946	—	—	*5*	22	8	160	639	1,229	316	1,184	705	—	*0*	*3*	7	3	33	77	169	44	261	238
1947	*1*	—	*6*	25	9	173	703	1,376	351	1,388	800	—	*1*	*2*	12	4	32	87	190	50	286	277
1948	—	*1*	*6*	33	11	163	737	1,520	378	1,589	878	*1*	*1*	*1*	8	3	34	109	191	53	311	273
1949	*1*	*1*	7	24	9	157	747	1,637	396	1,842	1,024	*1*	*1*	*1*	10	4	40	91	206	54	338	290
1950	*1*	*0*	*4*	29	10	165	822	1,837	440	2,027	1,205	—	*0*	*2*	8	3	42	107	214	57	344	336
1951	*1*	*0*	*4*	22	8	177	855	1,964	465	2,349	1,377	*2*	*0*	*2*	11	4	39	100	220	57	351	378
1952	*1*	—	*4*	25	8	179	841	2,145	491	2,517	1,558	—	—	*1*	7	2	39	108	254	63	347	422
MEDIASTINUM (I.S.C. No. 164)																						
1911–20	Not available				2	10	22	46	13	53	35	Not available				1	5	12	21	6	26	22
1921–30					2	11	32	63	17	82	55					1	5	13	27	7	40	35
1931–35					1	9	24	45	13	67	57					1	3	8	19	5	25	30
1936	—	*0*	*1*	*4*	*1*	*6*	14	40	10	51	*46*	—	—	*0*	*1*	*0*	*4*	*4*	17	4	20	37
1937	*1*	*1*	*2*	*4*	2	*6*	22	57	14	66	61	*1*	—	*1*	*0*	*0*	*3*	9	12	4	27	*23*
1938	—	*0*	*1*	*4*	*1*	*6*	18	42	11	71	*43*	*1*	*0*	*0*	*1*	*0*	*2*	*6*	16	4	25	*24*
1939	*1*	*0*	*1*	*3*	*1*	7	20	37	11	60	*37*	—	—	*1*	*1*	*1*	*3*	*6*	14	4	26	32
1940	*2*	*1*	*2*	*3*	2	7	30	55	15	57	*42*	—	*0*	*2*	*1*	*1*	*2*	*6*	14	4	22	30
1941	—	*1*	*5*	*3*	3	11	23	50	14	56	57	*1*	*1*	*0*	*2*	*1*	*3*	8	15	5	23	29
1942	—	*1*	*3*	*4*	2	10	28	47	14	57	54	—	*1*	*0*	*1*	*1*	*4*	7	11	4	26	39
1943	—	*1*	*2*	*4*	2	8	26	45	13	54	74	—	*1*	*1*	*2*	*1*	*3*	*6*	13	4	22	37
1944	*1*	*2*	*3*	*2*	2	*5*	27	42	13	63	*34*	—	*1*	*1*	*1*	*1*	*3*	9	14	4	20	*16*
1945	—	*1*	*3*	*2*	*2*	11	19	47	13	52	44	*1*	*2*	*1*	*2*	*2*	*3*	*6*	13	4	21	*15*
1946	—	*2*	*3*	*3*	2	7	17	33	10	43	45	*2*	*1*	*2*	*2*	*2*	*3*	7	12	4	18	*20*
1947	*3*	*1*	*3*	*3*	2	*6*	18	33	10	44	38	*1*	—	*1*	*2*	*1*	*3*	*5*	12	4	17	*16*
1948	*1*	*1*	*3*	*1*	2	*4*	16	30	9	39	38	—	*0*	*0*	*1*	*0*	*1*	*6*	9	3	23	*21*
1949	*2*	*1*	*3*	*4*	3	*4*	14	25	8	31	41	*1*	—	*2*	*1*	*1*	*3*	*4*	10	3	15	*17*
1950	—	*1*	*0*	*1*	*1*	*2*	7	22	5	29	*30*	*1*	*0*	*0*	*0*	*0*	*1*	*2*	8	2	*9*	*8*
1951	—	*0*	*1*	*1*	*1*	*2*	*7*	13	4	29	*30*	*1*	*0*	*0*	—	*0*	*1*	*2*	*5*	1	*7*	*13*
1952	*1*	*0*	—	*2*	*1*	*2*	*5*	16	4	22	*11*	—	*0*	—	*1*	*0*	*1*	*2*	*5*	1	11	*8*

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
	PROSTATE (I.S.C. No. 177)											UTERUS (I.S.C. Nos. 171–174)										
1911–20	Not available				*0*	2	16	99	18	329	510	Not available				11	218	556	791	247	861	773
1921–30					0	2	22	158	28	593	1,034					11	200	473	682	214	831	823
1931–35					*0*	2	26	175	31	734	1,355					8	171	414	585	184	742	745
1936	—	—	*0*	*0*	*0*	*3*	25	187	33	782	1,480	*1*	—	*2*	25	8	168	384	536	172	685	746
1937	*1*	*1*	*1*	*1*	*1*	*4*	26	195	35	781	1,561	*1*	*0*	*3*	17	6	159	415	553	177	670	754
1938	—	*0*	*1*	*0*	*0*	*5*	25	199	35	796	1,480	*1*	*0*	*0*	21	6	140	387	593	176	716	666
1939	—	*0*	*1*	—	*0*	*4*	27	201	36	735	1,522	—	*0*	*1*	20	6	149	381	542	168	692	734
1940	—	*0*	*0*	*1*	*0*	*3*	24	217	38	801	1,504	—	—	*2*	21	7	139	395	559	172	665	686
1941	*1*	—	*0*	*1*	*0*	*1*	30	216	38	804	1,643	—	*0*	*2*	23	7	140	373	576	171	726	684
1942	*1*	—	—	*0*	*0*	*2*	28	222	39	937	1,567	—	—	*1*	19	6	125	392	573	171	709	695
1943	—	—	*0*	*0*	*0*	*4*	25	196	35	936	1,778	*1*	—	*2*	21	7	126	388	544	166	664	730
1944	—	*1*	*0*	*1*	*1*	*2*	25	181	32	766	1,508	*2*	—	*2*	28	9	104	339	528	154	660	658
1945	*1*	—	—	*1*	*0*	*4*	23	192	34	786	1,676	*1*	*1*	*2*	21	7	97	340	542	154	629	691
1946	*1*	—	*1*	*1*	*1*	*2*	27	217	38	859	1,698	*1*	—	*1*	22	7	96	344	508	149	620	680
1947	*1*	—	—	—	*0*	*2*	25	223	39	899	1,934	—	—	*3*	21	*7*	98	308	497	143	652	678
1948	*1*	*0*	—	*0*	*0*	*2*	19	206	35	899	1,857	*1*	—	*2*	20	6	84	303	513	142	632	717
1949	*1*	—	*1*	*1*	*1*	*2*	22	185	33	929	2,091	*1*	—	*2*	21	7	87	279	504	137	608	712
1950	*1*	—	*1*	—	*0*	*1*	21	192	33	912	2,264	*1*	—	*1*	23	7	89	261	485	132	587	675
1951	—	*1*	—	*1*	*1*	*2*	20	169	30	886	2,305	—	*0*	*1*	22	7	93	247	456	126	553	703
1952	—	*0*	*1*	—	*0*	*2*	18	161	28	879	2,265	*2*	—	*2*	18	6	96	245	444	124	546	668
	TESTIS (I.S.C. No. 178)											OVARY AND FALLOPIAN TUBES (I.S.C. No. 175 part)										
1911–20	Not available				3	8	7	8	5	15	29	Not available				4	31	78	103	35	100	76
1921–30					4	10	7	9	6	15	28					5	43	112	156	51	170	133
1931–35					4	12	10	8	7	15	23					6	53	143	194	63	220	179
1936	*1*	*0*	*5*	14	6	11	*6*	*9*	7	*12*	*13*	—	*1*	*6*	17	7	61	155	229	72	267	207
1937	*1*	*0*	*6*	14	6	14	12	12	9	*17*	*39*	*2*	*1*	*6*	18	7	60	160	212	70	228	247
1938	*1*	—	*3*	13	5	12	*5*	*6*	6	20	*15*	*1*	*1*	*5*	15	6	59	174	236	75	271	217
1939	*2*	*0*	*4*	13	5	12	*6*	11	7	23	*20*	*1*	*0*	*6*	14	6	62	152	223	70	238	292
1940	*1*	*1*	*4*	12	5	13	10	12	8	*16*	*24*	*1*	*0*	*5*	14	6	63	162	243	75	253	216
1941	—	—	*4*	11	*4*	15	12	*8*	8	20	*14*	—	*2*	*6*	20	8	64	167	229	75	247	197
1942	*1*	*1*	*5*	13	6	15	11	*9*	8	*19*	*20*	*1*	*1*	*3*	16	6	62	175	237	76	239	235
1943	—	—	*5*	10	*4*	12	11	*6*	7	16	*23*	*1*	*2*	*5*	16	7	60	169	247	77	273	240
1944	—	—	8	11	5	12	10	*7*	7	15	*12*	—	*2*	*6*	17	7	66	180	247	80	296	248
1945	*1*	—	*5*	17	6	11	9	11	8	*10*	*25*	*1*	*0*	*5*	15	6	61	175	253	78	275	264
1946	*2*	*0*	8	18	8	13	11	*6*	9	*13*	*24*	—	*1*	*3*	19	7	62	177	260	80	271	214
1947	*1*	—	7	13	6	14	13	*7*	8	*9*	*24*	*1*	*1*	*7*	14	*6*	66	174	264	81	288	279
1948	*1*	*1*	*5*	15	6	14	12	14	9	*12*	*17*	—	*1*	*5*	15	6	65	185	255	81	303	255
1949	*1*	*1*	11	16	8	16	9	*5*	9	*12*	*13*	*1*	*2*	*6*	14	6	68	193	267	85	301	282
1950	*2*	—	*6*	18	7	17	9	11	10	*14*	*18*	—	*2*	*4*	16	6	58	208	285	88	326	278
1951	*1*	*0*	*5*	17	6	15	8	*9*	8	17	*22*	—	*1*	*6*	13	6	60	200	287	87	327	306
1952	*2*	—	7	13	6	15	11	10	9	19	*24*	—	*1*	*5*	13	5	59	209	285	88	298	279

Table LXXXI.— *continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
	PENIS (I.S.C. No. 179 part)											VAGINA, VULVA (I.S.C. No. 176 part)										
1911–20	Not available				0	3	9	29	6	51	108	Not available				1	6	20	49	12	100	174
1921–30					0	2	9	22	5	58	118					0	6	19	49	11	104	189
1931–35					0	3	9	21	5	52	126					0	5	19	43	10	111	206
1936	—	—	—	—	—	3	7	27	6	56	140	—	—	0	2	1	5	15	44	10	107	181
1937	—	—	—	1	0	0	7	20	4	50	100	1	0	—	1	0	4	14	44	10	108	177
1938	—	—	—	0	0	1	7	14	3	48	110	1	—	1	1	1	6	21	40	11	107	181
1939	—	—	—	1	0	1	5	20	4	38	142	—	—	—	1	0	4	16	37	9	88	213
1940	—	—	—	1	0	3	6	13	4	33	117	—	—	—	2	1	4	14	43	10	91	194
1941	—	—	—	—	—	2	7	19	4	54	135	—	—	1	1	1	5	16	49	11	98	180
1942	—	—	—	1	0	0	6	13	3	49	129	—	—	0	1	0	5	15	48	11	104	185
1943	—	—	—	1	0	2	6	16	4	50	72	—	1	—	1	1	5	14	38	9	105	210
1944	—	—	—	—	—	2	8	16	4	37	95	—	—	1	1	1	7	17	32	9	98	156
1945	—	—	—	0	0	2	7	17	4	35	54	1	—	—	1	0	5	17	30	8	85	171
1946	1	—	—	—	0	1	7	9	3	33	80	1	—	—	2	1	4	13	37	9	83	138
1947	—	—	—	—	—	1	5	15	3	43	79	—	—	—	0	0	5	17	37	9	80	169
1948	—	—	—	0	0	1	3	10	2	28	77	1	—	—	1	0	4	10	37	8	80	167
1949	—	—	—	1	0	1	3	9	2	28	93	—	0	—	2	1	3	14	30	8	78	144
1950	—	—	0	—	0	2	2	11	2	23	89	1	—	—	0	0	3	11	26	6	93	176
1951	—	—	—	—	—	2	3	12	3	31	96	1	—	—	1	0	4	8	33	7	75	165
1952	—	—	—	0	0	1	4	10	2	24	79	2	0	—	1	1	4	9	25	6	84	174
	BREAST (I.S.C. No. 170)																					
1911–20	Not available				0	1	3	6	2	12	25	Not available				6	176	474	696	210	946	1,503
1921–30					0	1	3	8	2	14	27					7	187	508	782	231	1,052	1,740
1931–35					0	1	3	9	2	17	33					8	189	529	839	244	1,098	1,849
1936	—	—	—	0	0	1	6	9	2	17	51	1	—	0	32	9	190	544	865	251	1,126	1,769
1937	—	—	—	0	0	2	1	11	2	17	21	—	0	1	27	8	192	520	831	242	1,109	1,637
1938	—	—	—	—	—	1	3	7	2	15	28	—	0	2	27	8	194	547	866	252	1,054	1,714
1939	—	—	0	0	0	—	3	8	2	13	27	—	—	1	26	8	197	528	847	246	1,140	1,780
1940	—	—	—	0	0	1	2	9	2	15	32	—	—	1	29	9	188	535	855	247	1,145	1,684
1941	—	—	—	0	0	1	5	7	2	16	38	—	—	1	32	9	208	550	814	247	1,051	1,588
1942	—	—	—	—	—	—	5	6	2	24	16	—	—	1	32	9	194	531	834	245	1,158	1,580
1943	—	—	—	0	0	2	7	9	3	26	34	—	—	—	31	9	203	518	827	243	1,134	1,613
1944	—	—	—	—	—	2	2	10	2	15	20	—	—	1	27	8	210	530	786	239	1,085	1,599
1945	—	0	—	0	0	1	3	6	2	17	46	1	—	1	31	9	198	500	785	233	1,068	1,596
1946	—	—	—	0	0	1	6	6	2	19	21	—	—	0	32	9	211	531	834	247	1,122	1,629
1947	—	—	—	1	0	2	2	9	2	15	31	—	—	2	31	9	224	520	785	240	1,092	1,717
1948	—	—	—	—	—	1	1	5	1	25	26	—	—	1	30	9	211	514	804	240	1,082	1,712
1949	—	—	—	0	0	1	3	11	2	18	32	—	—	1	33	10	206	493	763	230	1,112	1,754
1950	—	—	—	0	0	1	4	5	2	14	31	—	—	2	31	9	215	522	770	237	1,052	1,675
1951	—	—	—	0	0	1	3	8	2	13	25	—	—	1	30	9	223	502	777	236	1,060	1,634
1952	—	—	—	—	—	1	3	6	2	14	24	—	—	1	30	9	217	513	791	239	1,114	1,653

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
KIDNEY* (I.S.C. No. 180)																						
1911–20	Not available				4	10	25	56	16	72	71	Not available				3	5	16	35	10	58	60
1921–30																						
1931–35																						
1936	22	*3*	*1*	*2*	5	13	27	53	17	80	54	*11*	*1*	*1*	*2*	3	*6*	15	31	9	63	67
1937	*13*	*2*	*1*	*4*	4	14	26	62	18	90	66	*9*	*4*	*1*	*2*	3	*3*	18	35	10	55	72
1938	15	*2*	*1*	*4*	4	11	32	61	18	79	79	*9*	*2*	*1*	*1*	2	7	14	32	9	61	60
1939	14	*1*	*1*	3	3	9	37	57	18	70	72	16	*3*	*1*	*3*	4	*3*	18	36	11	56	67
1940	*12*	*1*	*1*	*1*	3	7	25	57	15	74	56	*11*	*4*	*1*	*3*	4	*5*	14	32	10	47	60
1941	19	*4*	*1*	*2*	5	10	30	68	19	78	66	15	*2*	*1*	*2*	4	*6*	15	24	9	47	54
1942	*13*	*2*	*1*	*3*	4	8	28	56	16	74	63	*13*	*2*	*1*	*3*	4	*5*	16	30	10	59	63
1943	15	*2*	*1*	*4*	4	*5*	31	59	17	104	74	*6*	*1*	*0*	*1*	1	*6*	17	38	10	65	69
1944	13	*2*	*1*	*2*	3	9	30	64	18	78	65	15	*3*	*0*	*1*	3	6	13	39	11	59	80
1945	15	*1*	*1*	*3*	4	9	29	72	19	78	66	18	*1*	*0*	*2*	3	6	12	29	9	53	58
1946	14	*1*	*1*	*3*	3	8	30	63	17	90	90	15	*2*	*1*	*2*	4	6	16	35	11	54	71
1947	18	*4*	*1*	*4*	5	7	27	76	20	107	88	15	*2*	*1*	*2*	4	*4*	17	34	10	58	72
1948	11	*3*	*1*	*3*	4	9	35	80	21	107	90	14	*3*	*0*	*3*	4	8	15	40	12	64	56
1949	15	*4*	*1*	*2*	4	10	39	71	21	122	93	16	*2*	*0*	*1*	3	*5*	15	33	10	63	93
1950	16	*1*	*2*	*3*	4	11	38	94	24	104	120	13	*3*	*1*	*2*	4	*4*	13	28	9	60	89
1951	12	*4*	*1*	*2*	4	12	39	88	23	113	116	15	*4*	*1*	*2*	*4*	*6*	14	40	11	71	87
1952	15	*3*	*1*	*2*	4	13	36	81	22	134	145	18	*3*	—	*2*	4	*6*	16	42	12	72	106
BLADDER, URETHRA† (I.S.C. No. 181)																						
1911–20	Not available				1	8	36	124	26	297	385	Not available				0	4	15	43	10	91	133
1921–30					1	8	38	132	28	309	467					0	4	17	48	11	108	173
1931–35					*0*	9	47	139	30	332	523					*0*	4	14	44	10	111	190
1936	*1*	—	*1*	*2*	*1*	10	44	136	30	295	598	—	—	—	*0*	*0*	*3*	17	57	12	109	199
1937	*1*	—	*0*	*2*	*1*	8	45	145	31	335	497	—	—	—	*1*	*0*	*4*	12	45	10	137	158
1938	*1*	—	*0*	*2*	*1*	9	47	152	32	362	520	—	—	*0*	*1*	*0*	*3*	14	54	11	108	154
1939	*1*	—	—	*1*	*0*	*7*	47	149	31	325	560	*1*	*0*	—	—	*0*	*3*	15	55	11	126	231
1940	*1*	*0*	*0*	*2*	*1*	11	43	168	35	342	553	—	*0*	—	*1*	*0*	*5*	19	43	10	131	235
1941	—	*0*	*0*	*2*	*1*	11	59	156	35	377	586	—	*0*	—	*1*	*0*	6	22	52	12	111	226
1942	*2*	—	—	*1*	*1*	11	61	180	39	355	623	—	—	*0*	*1*	*0*	*2*	19	63	13	124	259
1943	*1*	—	*0*	*1*	*0*	11	60	178	39	393	589	—	—	—	*0*	*0*	*4*	20	58	13	141	216
1944	*1*	*0*	—	*1*	*0*	7	52	162	34	366	560	—	—	—	*1*	*0*	7	21	60	14	115	194
1945	*3*	—	—	*2*	*1*	8	63	176	39	379	552	—	—	—	*1*	*0*	*5*	18	52	12	126	240
1946	—	—	—	2	*1*	15	53	169	37	396	599	—	—	—	*1*	*0*	*4*	20	59	13	143	244
1947	*1*	—	*0*	*1*	*0*	10	52	179	37	380	668	—	—	—	*0*	*0*	*4*	20	51	12	136	249
1948	—	—	—	*0*	*0*	11	56	189	39	424	682	—	—	—	—	—	*4*	19	58	12	145	262
1949	*2*	—	—	*1*	*1*	*9*	56	195	40	432	752	*2*	—	—	—	*0*	*4*	19	58	13	134	252
1950	*1*	*1*	—	*1*	*1*	9	59	203	42	439	741	*1*	—	—	*1*	*0*	*4*	18	55	12	158	282
1951	—	—	*0*	*2*	*1*	11	63	212	44	473	798	*1*	—	—	*1*	*0*	*2*	21	54	12	134	277
1952	—	—	*0*	*1*	*0*	11	66	203	43	502	890	*1*	*0*	—	*1*	*0*	6	19	52	12	120	290

* Excludes Ureter 1931 to 1949. Includes suprarenal 1931 to 1937.

† Includes Ureter 1911 to 1949

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
SKIN * (I.S.C. 190, 191)																						
1911–20	Not available				1	9	29	79	19	187	643	Not available				1	5	15	42	10	111	371
1921–30					1	8	26	82	18	210	705					1	7	13	36	9	102	388
1931–35					1	7	22	64	15	201	674					1	5	13	32	8	84	379
1936	*1*	*0*	*1*	*2*	*1*	*6*	23	59	14	160	633	*1*	*0*	*1*	*1*	*1*	*5*	18	30	9	92	318
1937	—	*1*	*1*	*3*	*1*	8	18	58	14	172	582	*1*	*0*	*2*	*4*	2	*5*	14	42	10	74	294
1938	—	*1*	*1*	*2*	*1*	*5*	14	52	12	164	622	*1*	—	*2*	*3*	*2*	9	18	25	9	85	300
1939	—	—	*1*	*2*	*1*	*6*	17	52	12	154	525	*1*	—	*1*	*3*	*1*	*6*	15	25	8	72	278
1940	*1*	*0*	*1*	*2*	*1*	*5*	25	53	13	130	567	—	*0*	*1*	*4*	1	6	14	27	8	73	279
1941	*1*	*1*	*1*	*3*	*2*	7	22	47	13	161	520	*1*	*0*	*1*	*5*	2	*4*	11	28	8	71	271
1942	—	—	*1*	*3*	*1*	*6*	16	49	12	148	451	*1*	*1*	*2*	*4*	2	*6*	13	30	9	70	275
1943	*1*	*0*	*2*	*3*	*2*	7	16	53	13	156	515	*1*	*1*	*1*	*3*	*2*	6	14	36	9	65	266
1944	*1*	*0*	*1*	*3*	*1*	*5*	19	42	11	132	464	*1*	*0*	*1*	*4*	*2*	7	15	27	8	72	251
1945	*1*	*1*	*1*	*3*	*2*	10	16	46	12	145	425	*1*	*0*	*2*	*3*	*2*	8	16	27	9	67	252
1946	—	*1*	*1*	*2*	*1*	8	20	45	12	113	386	*1*	—	*1*	*2*	*1*	6	8	26	7	64	238
1947	*1*	—	*2*	*6*	2	7	16	46	12	120	390	*1*	*0*	*1*	*4*	*2*	7	9	29	8	60	242
1948	*1*	*0*	*2*	*3*	2	8	14	40	10	105	409	—	*1*	*2*	*4*	*2*	6	12	22	7	58	215
1949	*2*	*0*	*1*	*2*	*1*	*5*	14	38	9	112	377	—	*0*	*1*	7	2	9	13	22	8	57	226
1950	—	—	*2*	*2*	*1*	*6*	14	40	10	123	382	*1*	*0*	*2*	*5*	2	7	14	29	9	55	218
1951	*1*	*0*	*1*	*3*	*1*	8	18	34	10	87	346	—	—	*1*	*4*	*1*	9	11	24	8	50	185
1952	*1*	*0*	*2*	*4*	*2*	*6*	17	31	9	103	306	*1*	*1*	*2*	*7*	3	11	13	30	10	52	191
SCROTUM † (I.S.C. No. 179 part)																						
1911–20	Not available																					
1921–30																						
1931–35																						
1936	—	—	—	—	—	—	*3*	*7*	2	*14*	*19*											
1937	—	*0*	—	*0*	*0*	*1*	*3*	*10*	2	22	*32*											
1938	*1*	—	—	—	*0*	*1*	*2*	*7*	2	20	*26*											
1939	—	—	—	—	—	*0*	*3*	*3*	*1*	17	*32*											
1940	—	—	—	—	—	*1*	*2*	*7*	2	*16*	*32*											
1941	—	—	—	*0*	*0*	*1*	*2*	*7*	2	20	*19*											
1942	—	—	—	*0*	*0*	*1*	*1*	*9*	2	*15*	*29*											
1943	—	—	—	*0*	*0*	*1*	*1*	*5*	*1*	16	*30*											
1944	—	—	—	—	—	*1*	—	*5*	*1*	*13*	*18*											
1945	—	—	—	—	—	*1*	*0*	*6*	*1*	*8*	*14*											
1946	—	—	—	—	—	*0*	*3*	*3*	*1*	*14*	*24*											
1947	—	—	—	*0*	*0*	—	*1*	*4*	*1*	*8*	*24*											
1948	—	—	—	—	—	*1*	*4*	*4*	*1*	*8*	*10*											
1949	—	—	—	—	—	—	*2*	*2*	*1*	*6*	*19*											
1950	—	—	—	—	—	*0*	*1*	*2*	*0*	*7*	*25*											
1951	—	—	—	—	—	*0*	*2*	*2*	*1*	*4*	*13*											
1952	—	—	—	*0*	*0*	—	*1*	*2*	*0*	*9*	*16*											

* Includes Anus from 1931. Includes Scrotum 1911 to 1935. † For years 1911 to 1935 see Skin

Table LXXXI.—*continued*

Period	Males											Females									
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
BONES (EXCEPT JAW) (I.S.C. Nos. 160 and 196 part)																						
1911–20	Not available				7	12	25	52	17	77	89	Not available				5	8	22	39	13	57	82
1921–30					8	13	27	56	19	83	109					6	11	23	40	15	66	86
1931–35					8	11	32	52	19	82	84					6	11	23	37	14	61	68
1936	*5*	*4*	15	11	9	15	30	58	21	96	140	*4*	*5*	9	7	7	11	24	45	16	70	64
1937	*4*	*3*	17	12	10	12	25	50	19	76	103	*3*	*6*	8	6	6	10	22	42	15	68	101
1938	*2*	*6*	17	9	9	15	27	62	21	99	89	*4*	*5*	10	9	7	14	21	40	16	55	58
1939	*3*	*4*	14	9	*8*	16	36	59	21	82	97	*6*	*4*	*6*	6	5	11	21	40	14	50	63
1940	*3*	*3*	13	7	7	10	31	61	19	97	117	*4*	*3*	6	7	5	11	20	45	14	63	83
1941	*3*	*6*	14	9	9	17	27	60	21	103	130	*2*	*6*	10	*5*	6	10	18	39	14	72	65
1942	*2*	*7*	12	8	8	11	38	65	22	114	102	*2*	*5*	10	7	7	11	20	39	14	77	111
1943	*5*	*6*	16	7	9	15	35	65	23	110	117	*3*	*6*	10	6	7	10	23	41	15	72	95
1944	*1*	*6*	15	9	9	11	30	65	21	85	117	*5*	*5*	8	6	6	10	29	40	15	64	84
1945	*3*	*5*	12	*5*	7	11	35	67	21	90	122	*3*	*5*	8	*6*	6	8	22	39	14	67	84
1946	*1*	*5*	12	7	7	12	33	63	20	87	132	*6*	*4*	8	*4*	5	9	23	42	14	60	87
1947	*4*	*5*	15	9	9	11	28	55	19	88	104	*5*	*3*	7	*4*	5	8	20	38	13	56	81
1948	*1*	*3*	14	*6*	7	9	25	55	17	91	103	*6*	*3*	9	*4*	5	9	19	39	13	61	89
1949	*2*	*5*	12	7	7	9	27	59	18	94	127	*6*	*5*	8	6	6	8	21	40	14	72	91
1950	*4*	*4*	17	*5*	8	9	19	53	17	77	113	*3*	*6*	8	*3*	5	7	11	37	11	50	79
1951	*2*	*5*	13	*5*	7	10	21	50	16	86	127	—	*3*	7	*6*	5	7	15	25	10	41	77
1952	*4*	*4*	12	7	7	7	24	39	15	73	103	*3*	*4*	9	*5*	6	7	11	27	10	48	66
THYROID GLAND (I.S.C. No. 194)																						
1911–20	Not available				0	1	4	9	2	12	12	Not available				0	3	9	20	5	34	33
1921–30					*0*	1	5	12	3	14	18					0	3	9	23	5	42	58
1931–35					0	*1*	*5*	12	3	20	16					0	3	11	24	6	44	54
1936	*1*	—	*0*	*0*	*0*	*1*	*6*	11	3	20	*13*	—	—	*0*	*1*	*0*	*3*	10	26	6	45	60
1937	—	—	*0*	*0*	*0*	*2*	*6*	*10*	3	*14*	*16*	—	—	—	*1*	*0*	*2*	8	23	5	47	54
1938	—	—	*0*	*1*	*0*	*1*	*6*	11	3	19	*20*	—	—	*0*	*1*	*0*	*3*	11	23	6	46	72
1939	—	—	*0*	*0*	*0*	*2*	*5*	11	3	18	*22*	—	—	*0*	*1*	*0*	*4*	10	26	6	42	58
1940	—	—	—	*0*	*0*	*2*	*5*	10	3	17	*24*	—	—	—	*1*	*0*	*4*	10	23	6	46	54
1941	—	—	—	*1*	*0*	*1*	*7*	12	3	21	*14*	—	*1*	—	*1*	*1*	*3*	11	27	7	39	65
1942	—	*0*	*0*	—	*0*	*4*	*5*	*9*	3	23	*27*	—	—	—	*1*	*0*	*3*	8	24	6	43	72
1943	—	—	*0*	—	*0*	—	*4*	11	2	20	*21*	—	—	—	*0*	*0*	*2*	13	22	6	42	47
1944	—	—	—	—	—	*2*	*2*	15	3	20	*26*	—	—	*1*	*1*	*1*	*2*	8	31	7	33	57
1945	—	—	—	*1*	*0*	*2*	*4*	*9*	2	20	*35*	—	—	—	*2*	*1*	*1*	8	26	6	47	58
1946	—	—	—	*0*	*0*	*1*	*4*	*6*	2	19	*24*	—	—	—	*0*	*0*	*3*	8	24	5	47	57
1947	*1*	—	—	*1*	*0*	*1*	*7*	10	3	24	*18*	—	—	—	*1*	*0*	*3*	11	27	6	38	57
1948	—	—	*0*	*0*	*0*	*1*	*4*	11	2	20	*19*	—	—	*0*	*1*	*0*	*3*	9	26	6	47	49
1949	—	—	—	*1*	*0*	*1*	*3*	10	2	19	35	—	—	*0*	*0*	*0*	*4*	12	21	6	48	64
1950	—	—	—	*0*	*0*	—	*5*	10	2	20	*18*	—	—	—	*1*	*0*	*4*	6	25	6	43	66
1951	—	—	*0*	*1*	*0*	*2*	*4*	15	3	18	*28*	*1*	—	*0*	*1*	*0*	*3*	8	24	6	46	72
1952	—	—	—	*0*	*0*	*2*	*6*	11	3	25	35	—	—	—	*0*	*0*	*3*	8	22	5	48	74

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 E A D R	35–	45–	55–	0–64 E A D R	65–	75 and over	0–	5–	15–	25–	0–34 E A D R	35–	45–	55–	0–64 E A D R	65–	75 and over
HODGKIN'S DISEASE (I.S.C. No. 201)																						
1911–20 1921–30 1931–35	Not available											Not available										
1936	*1*	11	11	17	11	18	24	42	14	26	*30*	*1*	*3*	9	7	6	8	*6*	15	7	16	*13*
1937	*4*	*6*	11	12	9	20	25	29	12	29	*21*	*3*	*3*	7	7	5	10	11	17	9	28	*23*
1938	*4*	7	13	19	12	14	26	35	12	29	*31*	*1*	*3*	8	10	6	13	11	16	9	22	*24*
1939	*1*	9	12	17	11	20	18	27	16	33	*25*	*1*	*2*	8	9	6	10	10	12	8	18	*29*
1940	—	11	10	19	11	20	25	36	19	33	*32*	*1*	4	*5*	8	5	10	11	18	9	17	*18*
1941	*2*	8	9	16	10	18	19	34	16	36	*21*	*1*	*2*	7	8	5	9	14	14	8	20	*25*
1942	*1*	7	13	17	11	19	30	34	19	31	*34*	*1*	*1*	*6*	10	5	9	12	18	9	20	*19*
1943	*1*	*7*	13	22	12	16	24	35	18	34	*13*	*1*	*3*	7	12	6	7	13	19	9	22	*12*
1944	*3*	*5*	12	19	11	22	28	36	19	36	*22*	*1*	*3*	7	12	6	8	12	14	9	21	*20*
1945	*2*	*6*	11	16	10	20	25	42	19	40	*48*	—	*1*	9	12	6	12	12	20	10	19	28
1946	*1*	*5*	13	24	12	24	31	34	20	38	*32*	*3*	*2*	8	12	7	8	12	16	9	24	*13*
1947	*1*	7	12	21	12	22	21	37	19	48	42	*1*	*2*	*6*	12	6	9	12	18	9	20	*19*
1948	*1*	8	11	18	11	27	27	45	21	39	47	*1*	*1*	7	10	5	11	13	18	9	23	*21*
1949	*2*	*5*	13	22	12	31	30	35	21	39	*22*	*1*	*1*	9	10	6	12	15	16	10	22	*16*
1950	*1*	*6*	11	22	11	21	28	35	19	41	*30*	—	*1*	*6*	13	6	10	8	22	9	26	25
1951	*1*	7	13	21	12	24	35	38	21	51	*31*	*1*	*2*	*6*	15	7	14	12	20	11	24	25
1952	*2*	*2*	14	26	12	23	32	45	22	49	37	*1*	*2*	8	16	8	10	10	20	10	28	26
LEUKÆMIA AND ALEUKÆMIA (I.S.C. No. 204)																						
1911–20 1921–30 1931–35	Not available											Not available										
1936	29	16	20	12	18	16	25	54	24	65	*49*	21	12	11	14	14	17	29	44	21	40	38
1937	39	17	12	13	18	22	28	52	25	59	*39*	23	12	9	13	13	15	26	35	19	48	*28*
1938	34	19	15	15	19	22	30	47	25	86	*41*	28	12	14	13	15	18	29	32	20	43	55
1939	38	18	15	16	19	16	28	56	26	76	*37*	25	14	12	13	15	15	25	41	20	56	52
1940	38	19	16	16	20	22	34	52	27	59	66	35	13	13	11	16	19	25	38	21	57	45
1941	37	22	18	17	22	17	25	48	25	64	43	25	13	14	10	14	17	21	42	20	47	42
1942	36	27	17	16	22	21	30	54	28	65	59	32	12	12	13	15	19	32	45	23	45	36
1943	42	26	17	16	23	21	38	56	30	79	70	25	16	15	14	16	15	31	41	22	57	44
1944	39	24	14	15	21	22	36	70	31	79	63	27	16	14	13	16	20	32	47	24	56	41
1945	45	21	21	18	24	20	38	60	31	105	71	35	18	14	15	18	25	26	54	26	61	44
1946	39	25	22	22	25	25	50	80	37	82	73	31	19	15	18	19	23	36	53	28	63	39
1947	49	26	15	19	24	24	42	68	34	99	68	37	21	15	14	20	21	38	53	28	72	56
1948	51	25	20	10	23	26	41	75	34	114	97	33	19	13	15	18	23	33	47	26	75	63
1949	52	24	24	24	28	26	40	89	39	114	117	43	20	18	14	21	21	36	61	29	94	62
1950	44	24	25	18	25	25	56	96	41	141	125	40	24	16	18	22	21	33	65	30	96	78
1951	46	31	22	24	29	30	41	82	39	151	131	47	21	15	18	22	28	42	70	33	103	91
1952	60	32	24	21	31	29	44	96	42	166	181	42	23	17	13	21	25	38	69	32	101	128

Table LXXXI.—*continued*

Period	Males											Females										
	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over	0–	5–	15–	25–	0–34 EADR	35–	45–	55–	0–64 EADR	65–	75 and over
NEOPLASMS (MALIGNANT, BENIGN, AND UNSPECIFIED) OF BRAIN AND CENTRAL NERVOUS SYSTEM (I.S.C. Nos. 193, 223, 237)																						
1911–20 1921–30 1931–35	Not available											Not available										
1936	25	21	16	26	22	57	94	100	50	52	30	15	12	22	24	19	46	74	81	41	57	37
1937	21	18	19	33	23	54	90	114	52	60	32	12	16	17	24	18	38	69	74	38	58	31
1938	22	21	17	28	22	53	106	97	51	60	33	14	15	14	20	16	52	66	76	38	45	42
1939	23	18	17	31	22	54	99	112	53	57	35	21	19	18	2o	21	47	71	82	42	52	32
1940	21	26	20	25	23	57	97	106	53	51	7	22	15	18	29	21	47	65	68	39	45	19
1941	33	17	16	27	22	58	108	95	52	57	9	12	16	12	29	18	42	76	60	37	45	25
1942	21	17	22	26	22	55	104	98	51	59	23	19	20	20	22	20	38	56	69	36	42	21
1943	23	22	14	29	22	55	93	95	49	71	36	15	23	19	24	21	44	66	66	38	42	21
1944	22	21	16	24	21	54	89	105	49	53	28	20	16	15	26	19	39	66	70	37	43	18
1945	22	22	17	29	23	58	107	122	56	65	25	16	19	15	25	19	47	78	80	42	43	39
1946	18	23	13	28	21	60	119	120	57	59	21	23	20	13	24	20	45	74	79	41	45	24
1947	32	20	19	32	25	63	101	134	59	65	27	24	14	15	29	20	37	80	82	41	57	19
1948	25	19	18	31	23	60	120	143	62	82	35	22	15	16	22	18	40	73	83	40	58	25
1949	27	26	20	30	26	60	114	162	65	81	25	28	14	14	26	19	42	76	97	44	56	28
1950	18	20	15	25	20	62	111	160	62	85	36	23	17	14	26	20	44	85	98	45	66	32
1951	37	17	16	31	24	56	116	169	65	96	36	19	14	17	23	18	42	74	96	42	61	41
1952	28	21	18	26	23	61	117	185	68	94	27	23	19	14	16	17	38	70	100	41	65	31

Table LXXXII—Leukæmia and aleukæmia (6th Revision, No. 204). Deaths and death rates per million living, by sex at ages 0-14 and 15 years and over, in Standard Regions and in Urban and Rural aggregates within four regional groups, 1946-52.

Standard Regions		Males				Females			
		0–14 years		15 years and over		0–14 years		15 years and over	
		Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
North of England									
Northern	Urban Aggregate	299	221	1,298	307	238	183	1,134	231
East and West Ridings									
North Western	Rural Aggregate	39	196	159	244	32	169	149	224
Midlands and East									
North Midland	Urban Aggregate	235	257	894	318	157	180	795	251
Midland									
Eastern	Rural Aggregate ..	69	205	331	301	58	180	290	259
South of England									
London and South Eastern	Urban Aggregate	377	264	1,793	371	303	219	1,763	301
Southern									
South Western	Rural Aggregate	83	266	346	336	75	254	319	284
Wales									
Wales I	Urban Aggregate	58	280	186	285	31	159	140	193
Wales II	Rural Aggregate	22	255	109	369	11	131	73	241

Table LXXXIII.—Leukæmia and aleukæmia (6th Revision, No. 204). Deaths and death rates per million living, by sex at ages 0-14 and 15 years and over, in each County Borough and Administrative County of England and Wales, 1946-52.

County Borough	Males				Females			
	0–14 years		15 years and over		0–14 years		15 years and over	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Barnsley	1	*103*	2	*72*	2	*221*	5	*178*
Barrow-in-Furness	3	*382*	6	*239*	1	*127*	4	*154*
Bath	1	*124*	8	*309*	2	*247*	15	*414*
Birkenhead	4	*233*	20	*408*	5	*287*	11	*197*
Birmingham	31	239	120	302	27	211	108	243
Blackburn	5	*500*	15	*371*	3	*293*	12	*239*
Blackpool	1	*83*	17	*323*	1	*80*	9	*126*
Bolton	6	*340*	12	*200*	1	*61*	12	*165*
Bootle	3	*303*	8	*329*	3	*287*	9	*340*
Bournemouth	3	*225*	23	492	4	*329*	32	468
Bradford	3	*99*	35	346	3	*102*	26	203
Brighton	5	*330*	23	432	2	*138*	30	417
Bristol	7	*143*	47	298	7	*148*	46	252
Burnley	2	*229*	5	*162*	2	*242*	7	*193*
Burton upon Trent	—	—	7	*395*	1	*194*	3	*149*
Bury	2	*345*	6	*284*	2	*381*	8	*313*
Canterbury	1	*323*	5	*524*	1	*392*	2	*180*
Carlisle	1	*135*	4	*167*	2	*288*	4	*145*
Chester	2	*392*	3	*179*	1	*204*	5	*240*
Coventry	8	*274*	23	242	7	*227*	24	247
Croydon	4	*154*	34	376	4	*162*	37	348
Darlington	2	*198*	10	*330*	1	*115*	10	*285*
Derby	4	*267*	15	*286*	1	*69*	22	374
Dewsbury	1	*179*	9	*468*	1	*168*	1	*46*
Doncaster	1	*113*	10	*327*	1	*110*	9	*281*
Dudley	3	*458*	3	*131*	—	—	4	*158*
Eastbourne	2	*317*	9	*485*	1	*200*	10	*370*
East Ham	2	*163*	22	494	4	*307*	19	*383*
Exeter	2	*276*	14	*528*	—	—	12	*357*
Gateshead	3	*203*	14	*344*	—	—	8	*177*
Gloucester	2	*292*	11	*448*	1	*130*	4	*151*
Great Yarmouth	2	*323*	7	*405*	—	—	3	*141*
Grimsby	1	*83*	7	*216*	—	—	4	*112*
Halifax	1	*106*	14	*408*	5	*498*	9	*208*
Hastings	3	*451*	5	*246*	—	—	17	*535*
Huddersfield	6	*449*	15	*316*	—	—	15	*272*
Ipswich	5	*412*	10	*273*	—	—	13	*304*
Kingston upon Hull	7	*184*	32	314	8	*214*	22	189
Leeds	7	*131*	57	318	13	*243*	46	213
Leicester	5	*154*	35	351	2	*69*	36	301
Lincoln	1	*140*	10	*380*	2	*305*	7	*250*
Liverpool	24	231	95	366	20	196	81	256
Manchester	21	266	87	355	15	*198*	78	266
Middlesbrough	2	*99*	12	*234*	5	*273*	18	*333*
Newcastle upon Tyne	11	*332*	37	355	5	*155*	31	257
Northampton	2	*186*	16	*432*	3	*291*	11	*240*
Norwich	2	*163*	17	*396*	—	—	14	*271*
Nottingham	6	*162*	37	353	7	*207*	25	201
Oldham	2	*157*	14	*319*	1	*83*	9	*173*
Oxford	3	*297*	15	*395*	2	*202*	10	*228*
Plymouth	9	*391*	21	294	3	*135*	13	*161*
Portsmouth	7	*279*	22	272	8	*313*	17	*185*
Preston	2	*152*	8	*182*	2	*163*	10	*206*
Reading	3	*251*	13	*311*	3	*239*	8	*167*
Rochdale	4	*476*	8	*212*	1	*129*	8	*209*
Rotherham	2	*221*	6	*196*	3	*306*	8	*250*
St. Helens	1	*74*	11	*274*	2	*150*	9	*211*
Salford	4	*186*	16	*257*	6	*293*	15	*206*
Sheffield	15	*267*	60	318	14	*253*	50	235
Smethwick	3	*335*	15	*557*	3	*357*	6	*188*
Southampton	5	*242*	24	381	5	*252*	16	*223*
Southend-on-Sea	4	*250*	14	*279*	4	*269*	17	*250*
Southport	—	—	11	*384*	1	*138*	14	*335*
South Shields	5	*394*	18	*485*	3	*261*	19	*448*
Stockport	4	*265*	14	*277*	3	*202*	18	*300*
Stoke on Trent	3	*86*	29	292	8	*258*	31	287
Sunderland	4	*176*	14	*225*	2	*90*	19	*265*
Tynemouth	—	—	7	*308*	—	—	1	*38*
Wakefield	2	*272*	6	*268*	—	—	11	*467*
Wallasey	4	*338*	13	*393*	2	*183*	9	*208*
Walsall	6	*401*	23	571	6	*456*	15	*339*
Warrington	2	*193*	7	*250*	2	*222*	6	*190*
West Bromwich	3	*271*	9	*285*	2	*203*	5	*149*
West Ham	4	*201*	16	*253*	4	*209*	17	*247*
West Hartlepool	5	*518*	7	*283*	1	*109*	8	*287*
Wigan	2	*196*	10	*324*	1	*112*	8	*234*
Wolverhampton	6	*282*	17	*300*	10	*552*	15	*234*
Worcester	5	*746*	5	*233*	—	—	5	*190*
York	2	*165*	12	*319*	1	*92*	10	*229*
Cardiff	6	*214*	36	426	2	*77*	24	241
Merthyr Tydfil	1	*152*	9	*404*	3	*462*	4	*162*
Newport (Mon.)	2	*162*	10	*267*	4	*338*	10	*239*
Swansea	5	*292*	14	*238*	2	122	7	*108*
Total	**356**	**229**	**1,567**	**324**	**290**	**194**	**1,390**	**247**

Table LXXXIII.—*continued*

Admin. County	Males				Females			
	0–14 years		15 years and over		0–14 years		15 years and over	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
London	86	262	457	376	69	219	457	311
Bedfordshire	11	*315*	41	358	6	*191*	24	195
Berkshire	12	*376*	31	296	10	*338*	29	251
Buckinghamshire ..	17	402	48	345	11	276	43	280
Cambridgeshire	1	*58*	19	*299*	5	*324*	17	*243*
Cheshire	18	*203*	101	347	12	*145*	71	209
Cornwall	14	*388*	29	238	9	*268*	50	347
Cumberland	10	*370*	14	*180*	4	*169*	19	*228*
Derbyshire	26	329	66	263	10	*128*	75	283
Devon	14	*275*	75	412	5	*104*	60	270
Dorset	7	*233*	41	403	6	*208*	46	386
Durham	22	200	93	279	23	219	71	207
Ely, Isle of	1	*101*	8	*239*	—	—	10	*290*
Essex	39	221	207	368	31	182	164	255
Gloucestershire	8	*153*	41	272	16	*337*	40	236
Herefordshire	6	*418*	17	*375*	1	*73*	12	*237*
Hertfordshire	6	*91*	73	339	11	*171*	72	289
Huntingdonshire ..	1	*130*	7	*272*	—	—	8	*323*
Kent	43	255	191	360	48	289	219	347
Lancashire	47	215	222	302	33	155	189	223
Leicestershire	9	*240*	42	329	5	*134*	30	218
Lincoln (Pts. of Holland)	2	*161*	15	*410*	1	*86*	9	*231*
Lincoln (Pts. of Kesteven)	1	*68*	15	*318*	3	*215*	17	*350*
Lincoln (Pts. of Lindsey)	10	*276*	42	374	6	*178*	25	215
Middlesex	65	274	283	347	43	184	271	280
Norfolk	9	*215*	33	242	13	*317*	38	270
Northamptonshire ..	10	*348*	22	238	4	*146*	15	*147*
Northumberland ..	10	*200*	40	248	9	*189*	40	231
Nottinghamshire ..	11	*175*	64	329	11	*183*	55	267
Oxfordshire	4	*222*	23	356	7	*381*	23	345
Rutland	1	*357*	2	*261*	—	—	—	—

Admin. County	Males				Females			
	0–14 years		15 years and over		0–14 years		15 years and over	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Peterborough, Soke of ..	3	*426*	7	*305*	—	—	8	*317*
Salop	11	*322*	44	418	3	*95*	18	168
Somerset	13	*256*	60	357	10	*207*	49	248
Southampton	18	*252*	87	398	13	*194*	72	295
Staffordshire	38	371	72	233	15	*147*	84	260
Suffolk, East	4	*165*	21	271	4	*171*	27	312
Suffolk, West	3	*236*	14	*312*	4	*171*	9	*194*
Surrey	48	338	212	459	31	227	183	313
Sussex, East	8	*233*	39	350	7	*217*	57	308
Sussex, West	7	*205*	32	301	13	*414*	46	328
Warwickshire	11	*189*	62	353	11	*202*	60	313
Westmorland	3	*403*	6	*256*	1	*144*	7	*244*
Wight, Isle of	6	*594*	16	*486*	2	*226*	12	*287*
Wiltshire	7	*178*	44	306	10	*249*	29	206
Worcestershire	15	*315*	36	255	9	*203*	38	240
Yorks. (East Riding) ..	4	*182*	22	284	5	*227*	22	255
Yorks. (North Riding) ..	4	*93*	24	175	7	*170*	31	*219*
Yorks. (West Riding) ..	36	199	163	284	27	154	154	242
Anglesey	1	*202*	2	*115*	—	—	8	*379*
Brecknockshire	3	*488*	5	*238*	1	*174*	6	*274*
Caernarvonshire	5	*382*	10	*228*	1	*84*	12	*220*
Cardiganshire	2	*412*	8	*397*	—	—	6	*265*
Carmarthenshire ..	2	*111*	27	410	1	*59*	16	*231*
Denbighshire	3	*154*	26	420	4	*223*	14	*204*
Flintshire	3	*179*	16	*312*	4	*252*	12	*213*
Glamorganshire ..	25	292	75	277	13	*157*	58	202
Merionethshire	1	*230*	5	*330*	1	*220*	3	*190*
Monmouthshire ..	14	*357*	31	257	4	*115*	17	*141*
Montgomeryshire ..	—	—	6	*353*	1	*196*	7	*380*
Pembrokeshire	5	*510*	8	*243*	—	—	8	*226*
Radnorshire	2	*889*	7	*854*	1	*465*	1	*137*
Total ..	826	252	3,549	330	615	195	3,273	267

ACCIDENTAL AND VIOLENT DEATHS

In 1952, there were 18,802 deaths (11,992 males; 6,810 females) due to accidents and violence; this was fewer than in 1950 or 1951, when 18,889 and 19,756 accidental or other violent deaths were registered. The percentage distribution according to the external cause of death was broadly as follows:

	Males		Females	
	Numbers	Percentage	Numbers	Percentage
Motor vehicle traffic accidents	3,013	*25*	958	*14*
Other motor and road vehicle accidents ...	363	*3*	88	*1*
Rail, water and air transport	818	*7*	86	*1*
Accidental poisoning	400	*3*	443	*7*
Falls	1,676	*14*	2,402	*35*
Burns	321	*3*	510	*8*
Drowning	713	*6*	182	*3*
Suicide	2,788	*23*	1,550	*23*
Homicide	102	*1*	93	*1*
All other external causes	1,798	*15*	498	*7*
Total violent deaths	**11,992**	*100*	**6,810**	*100*

Road accidents involving motor vehicles continued to take a heavy toll of male lives, one quarter of all violent deaths, whereas over one-third of the female deaths were due to falls. Nearly a quarter of the violent deaths of both sexes were suicides.

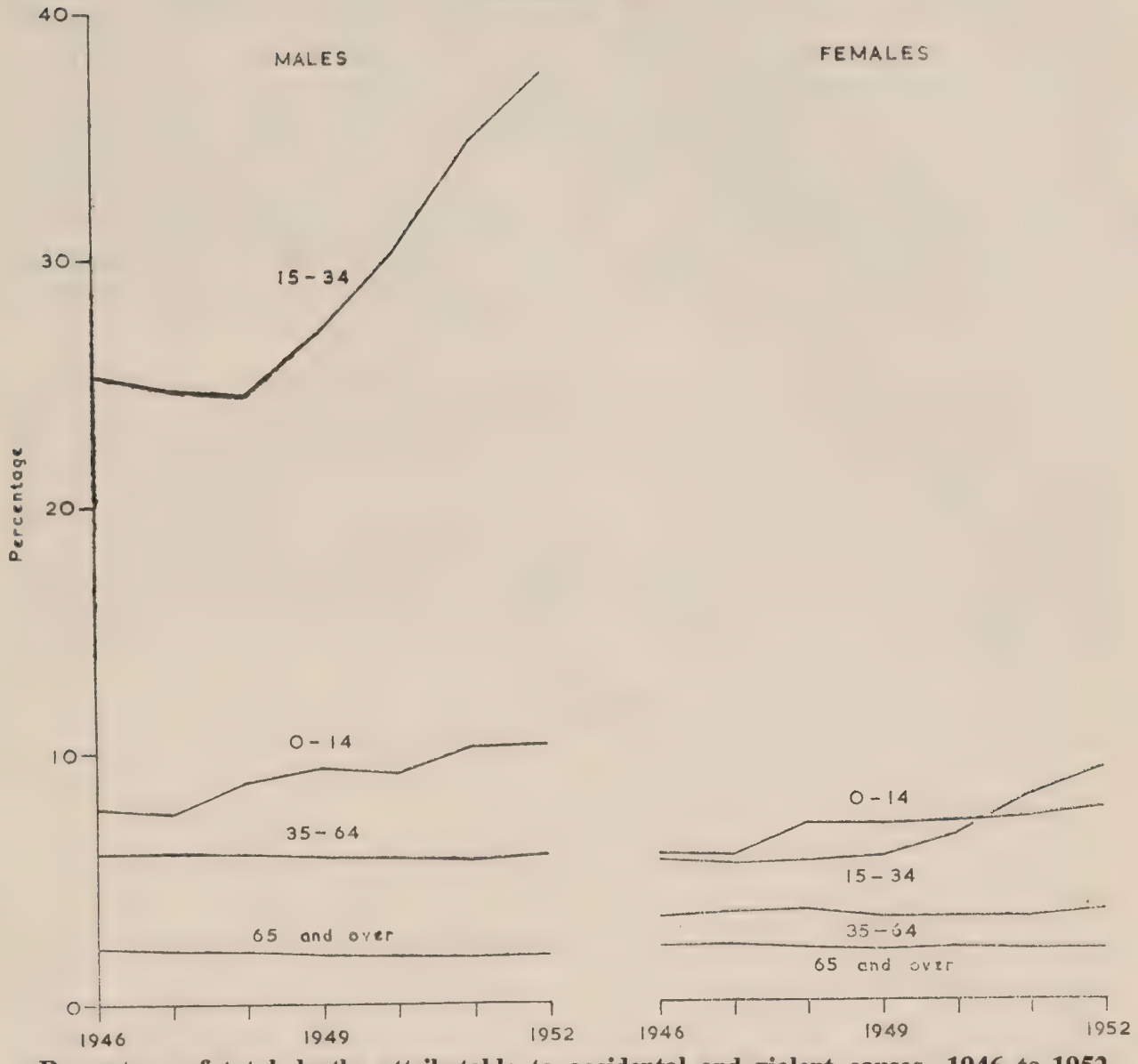
Table LXXXIV., (page 198) shows the trend in violent death rates since 1901. While there has been considerable reduction in the death rates of school children, those for young men, which have been increasing since 1948, give cause for anxiety. At ages 15 and over, female death rates were lower in 1952 than in 1951, and there was also a reduction in rates for men aged 45 and over.

In Table LXXXV., (page 198) and Diagram I8, violent deaths are shown as a percentage of deaths from all causes. During 1946-52, the proportion of such deaths at ages 35-64 and 65 and over has remained fairly constant, that for males exceeding the females at ages 35-64, while at 65 and over the female proportion was slightly in excess of the male. Among children under 15, the proportion increased in 1948 for both sexes and has tended to go on increasing. Since 1948 there has been a spectacular increase in the proportion of violent deaths of young men aged 15-34, accompanied by some increase in that for women of the same ages. While total deaths of young men have decreased by 27 per cent from 10,308 in 1948 to 7,564 in 1952, violent deaths have increased by 12 per cent from 2,537 to 2,848. The wastage in young men's lives by accidental death calls for investigation and preventive measures.

Railway Accidents

An average of 321 men and 33 women were killed annually in railway accidents during 1949-51; in 1952 the numbers were 390 males and 59 females. This may be compared with the annual average of 518 male and 52 female deaths during the years 1940-44, when operating conditions were affected by war-time circumstances. Of the men who were killed in 1952, 184 (47 per cent) were known to be railroad employees and 107 (27 per cent) were passengers.

Diagram 18



Percentage of total deaths attributable to accidental and violent causes, 1946 to 1952

Motor and Other Road Vehicle Accidents

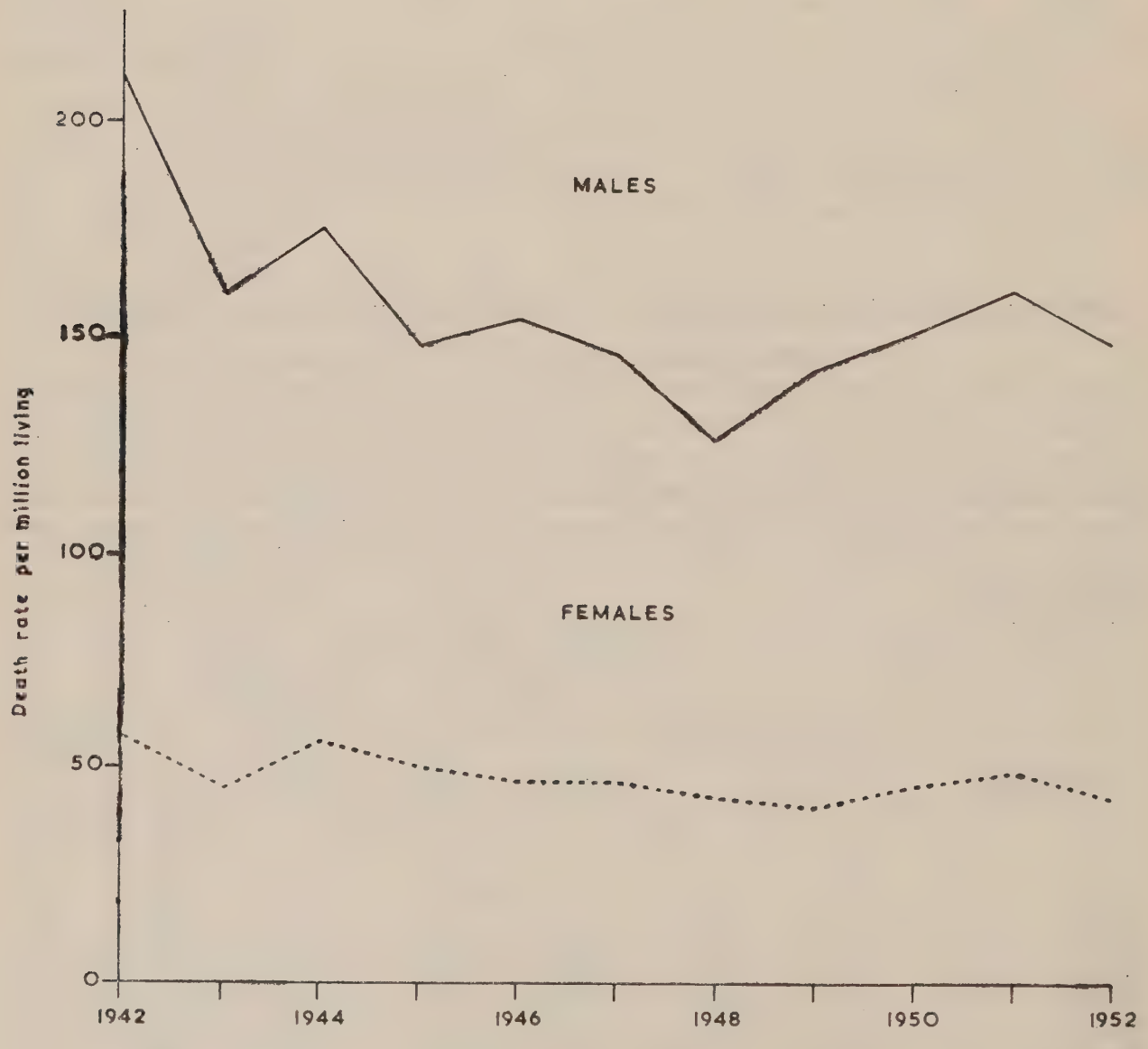
Motor vehicle traffic accidents in 1952 caused the deaths of 3,013 males and 958 females; decreases of 6 and 10 per cent respectively from the average for 1950 and 1951. In addition 134 males and 12 females died in non-traffic accidents and 229 males and 76 females in accidents involving road vehicles other than motor. The following table shows for males of various age groups, the percentage distribution of deaths from motor vehicle traffic accidents of different types:

Age group	Accident to Pedestrian	Accident to Pedal Cyclist	Accident to rider or passenger of Motor Cycle		Accident to occupant of other motor vehicle	Total	Total number of deaths
			Collision	Non-collision			
0–4	*93*	*3*	—	—	*4*	*100*	187
5–9	*80*	*11*	*1*	—	*8*	*100*	178
10–14	*25*	*65*	*1*	—	*9*	*100*	99
15–19	*12*	*26*	*37*	*14*	*11*	*100*	206
20–29	*6*	*6*	*50*	*22*	*16*	*100*	656
30–49	16	*13*	*34*	*11*	*26*	*100*	729
50–54	*31*	*29*	*14*	*5*	*21*	*100*	133
55–64	*50*	*21*	*11*	*4*	*14*	*100*	285
65–79	*68*	*17*	*3*	*1*	*11*	*100*	414
80 and over ...	*86*	*6*	*1*	*1*	*6*	*100*	126

At the extremes of youth and old age, the majority of those killed by motor vehicles were pedestrians. At ages 10-14, when many boys have acquired bicycles, the percentage of pedal cyclists among the killed rose to 65, while that of pedestrians dropped to 25. At 15-19, the transition to motor cycles was emphasized by 51 per cent of the fatally injured being motor cycle riders or passengers; and this proportion reached a maximum of 72 per cent at ages 20-29. In the two following age groups, 30-49 and 50-54, the proportions of accidents in which persons in other motor vehicles were killed reached maxima of 26 and 21 per cent. An increase in the percentage of pedestrian deaths started at ages 30-49, and continued steadily upward in successive age groups, while the proportions of motor cyclists among the dead decreased.

The death rates due to motor vehicle accidents are shown by sex and age in Table LXXXVI (page 199). The death rate at all ages, which for men had risen from 126 in 1948 to 161 in 1951, decreased to 149 in 1952, and the female rate which had also been increasing since 1949, was lower in 1952 (42) than in 1951 (49) (see Diagram 19). The rates in most age groups in 1951 were higher than in 1950; in 1952 this trend was reversed, the only sex-age group in which there was an increase being males aged 35-44. The Comparative Mortality Index decreased for men from 0·77 in 1951 to 0·71 in 1952, and for women from 0·71 to 0·62.

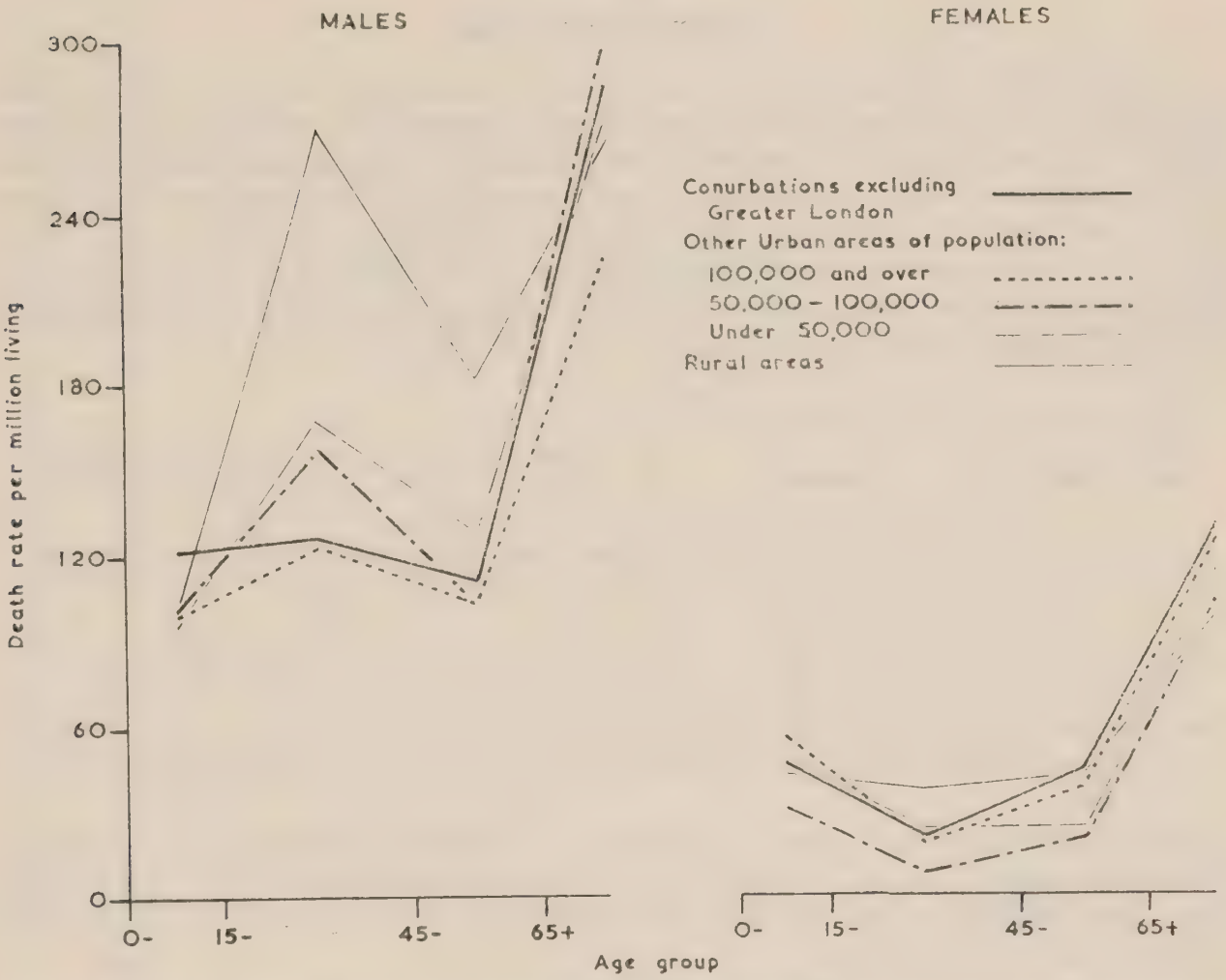
Diagram 19



Crude death rates per million living due to motor vehicle accidents, 1942 to 1952

Table LXXXVII., (page 200) shows the regional death rates from motor vehicle accidents according to place of residence (see also Diagram 20). Rates for boys under fifteen were somewhat higher in the conurbations outside Greater London than elsewhere. At ages 15-44 and 45-64, rates for men in rural areas were far in excess of those in other areas, while rates for men of 65 and over were highest in the conurbations and urban areas with population from 50,000-100,000. Female death rates were lowest in each age group in the latter areas, but at 45 and over the highest rates were in the conurbations and large urban areas. The highest death rates for children under 15 occurred, for both boys and girls, in the Northern and North Western regions and for girls the rate was also high in the North Midland region.

Diagram 20



Motor vehicle accidents : Death rates per million living according to sex and age in aggregates of urban and rural areas in England and Wales

Table LXXXVIII., (page 201) shows deaths from road accidents according to the type of accident. Deaths of male pedestrians, pedal cyclists and motor cyclists due to motor vehicle accidents were fewer in 1952 than in 1951, but while the number of pedestrians killed in 1952 was only 51 per cent of the average of 1936-40, years when the maximum number of deaths occurred, that of motor-cyclists was roughly the same. Deaths of occupants of motor-vehicles in traffic accidents decreased from 499 in 1951 to 469 in 1952 for men and from 200 to 143 for women; the number of men fatally injured in non-traffic accidents however increased from 57 to 70.

Deaths due to road accidents according to the vehicles involved are shown in Table LXXXIX., (page 202). Accidents in 1952 in which motor goods vehicles were involved not only caused the deaths of 129 of their occupants, but also of 642

pedestrians and 202 pedal cyclists. There were 218 deaths of pedestrians in 1952 due to accidents involving motor and trolley buses, the lowest in the twelve years shown.

Aircraft Accidents

In 1952, 291 men and 20 women died following aircraft accidents, compared with an average of 252 men and 17 women in the two previous years. Of these 291 men, 222 or 76 per cent were personnel in military aircraft. Table XC (page 204) shows the death rates per million living by sex and age. The rate for men aged 20-24 increased from 34 in 1949 to 67 in 1952; at ages 25-34 it rose from 26 in 1949 to 48 in 1951 and fell to 38 in 1952.

Accidental Poisoning

In 1952, 843 people died from accidental poisoning, 23 more than in the previous year. Poisoning by solids and liquids caused 154 male and 141 female deaths; 246 males and 302 females were poisoned by gases and other vapours. These deaths were 41, 9, 6 and 14 per cent respectively above the previous three years' average. The following table shows the numbers of deaths, the crude death rates and comparative mortality indices since 1949; each of the latter has risen during the four years and in particular that for males due to poisoning by solids and liquids which increased by 65 per cent from 0·85 to 1·40.

Poisoning Agent		Numbers				Crude Death Rates per million living				Comparative Mortality Indices (1938 = 1·00)			
		1949	1950	1951	1952	1949	1950	1951	1952	1949	1950	1951	1952
Drugs	M	57	77	81	111								
	F	84	108	117	123	4	5	6	7	0·85	1·02	1·09	1·40
Other solids & liquids	M	37	36	40	43	4	6	6	6	1·13	1·58	1·58	1·55
	F	17	34	26	18								
Gases & vapours	M	232	208	252	246	11	10	12	12	1·38	1·23	1·50	1·46
	F	235	255	304	302	10	11	13	13	1·84	1·96	2·32	2·26

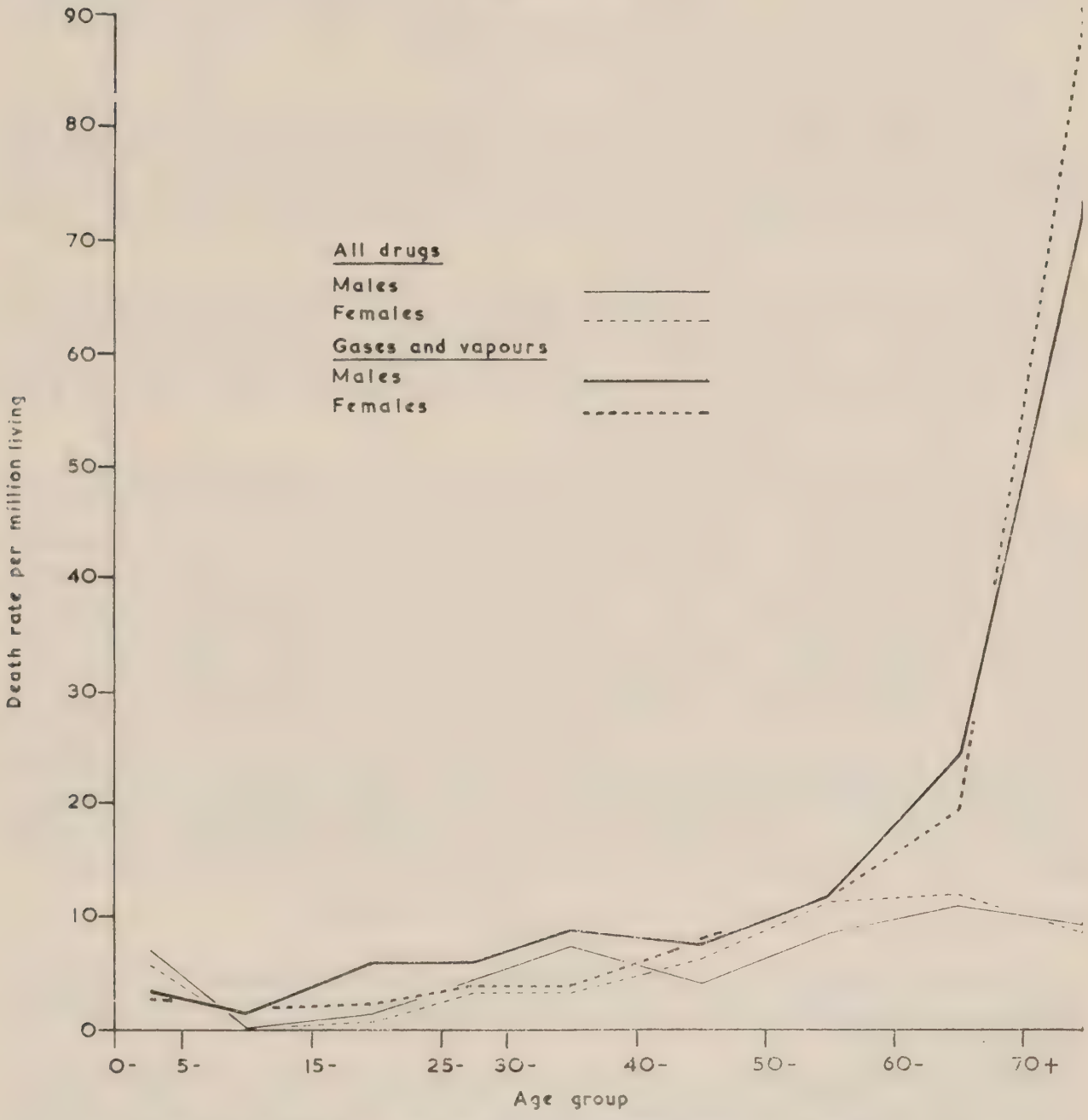
Barbiturates were responsible for 140 out of 234 deaths from drug poisoning compared with 33 out of 78 deaths from drug poisoning in 1942. The death rates per million by sex and age for poisoning by drugs and by gases and vapours were as follows:

		Age Groups								
		0–4	5–14	15–24	25–29	30–39	40–49	50–59	60–69	70 and over
Drugs	M	7·2	0·0	1·5	4·5	7·3	4·0	8·5	11·0	9·1
	F	5·8	0·0	0·7	3·1	3·1	6·3	11·1	11·8	8·6
Gases and Vapours	M	3·3	1·3	5·9	5·7	8·9	7·4	11·4	24·3	73·3
	F	2·9	1·3	2·1	3·8	3·7	7·5	11·1	19·3	90·1

The rates were in each case lower at ages 5-14 than at 0-4 and then showed an upward trend, especially marked in the case of gas and vapour poisoning, where rates of 73 and 90 were reached at ages 70 and over (see Diagram 21.)

Table XCI., (page 205) shows that about half the fatal cases of aspirin poisoning in the last four years and rather more than half of those due to poisoning by barbiturates arose at home. There were no fatal cases of corrosive poisoning in industrial places in 1952, but 24 of gas poisoning. The majority of fatal cases of utility gas poisoning arose at home.

Diagram 21



Accidental poisoning: Death rates per million living according to age

Accidental Falls

In 1952, 1,676 males and 2,402 females died from injuries received in falls, compared with 1,816 males and 2,657 females in 1951. About one-fifth of the fatal falls for both sexes occurred on stairs; falls from one level to another caused 36 per cent of male compared with 12 per cent of female deaths; and falls on the same level, 29 per cent as opposed to 42 per cent. The following table shows the distribution of fatal falls by place of occurrence from 1949 to 1952:

	Males				Females			
	1949*	1950	1951	1952	1949*	1950	1951	1952
Falls on stairs	290	260	320	321	463	458	502	488
Falls from ladders	81	83	95	88	10	6	5	13
Other falls from one level to another	614	555	607	507	355	365	423	267
Fall on same level	509	448	516	485	1,131	1,115	1,111	1,004
Unspecified falls	167	231	278	275	406	607	616	630
Total falls	**1,661**	**1,577**	**1,816**	**1,676**	**2,365**	**2,551**	**2,657**	**2,402**

* Civilians only.

Table XCII., (page 206) shows an improvement in male death rates from accidental falls except at ages 10-19. Female rates at ages 45 and over, where there were at least 20 deaths in each age group, were also lower in 1952 than 1951. The rate for elderly women of 75 and over remained considerably higher than that for men of the same age.

Nearly four-fifths of fatal falls on the same level during 1949-52 occurred at home (see Table XCIII., page 207). Of falls from one level to another, 17 per cent happened in farms, mines or other industrial premises, and it must be remembered that this does not include falls in transport, as for example a fall from a train or into the hold of a ship.

Table XCIV., (page 207) shows the death rates from accidental falls in the conurbations and other areas. Female rates ranged from 363 on Merseyside to 41 in Greater London; the variation in male rates, from 111 in West Yorkshire and 110 on Tyneside to 71 in the West Midlands, was not so wide. In the areas outside the conurbations, male and female rates were about the same in the densely populated urban areas; in areas with populations between 50,000 and 100,000, female rates were 1·2 times the male, and 1·8 times in those with under 50,000. In rural areas the position was reversed, male rates being 1·2 times the female. Rates at ages 75 and over, already high in 1951, increased in 1952 for women on Tyneside and Merseyside, in West Yorkshire and the West Midland conurbation, and for males in Greater London and on Tyneside. Diagram 22 (page 195) shows the monthly variation in the numbers of deaths, with winter maxima more clearly marked among women than men. (*See also page 75*)

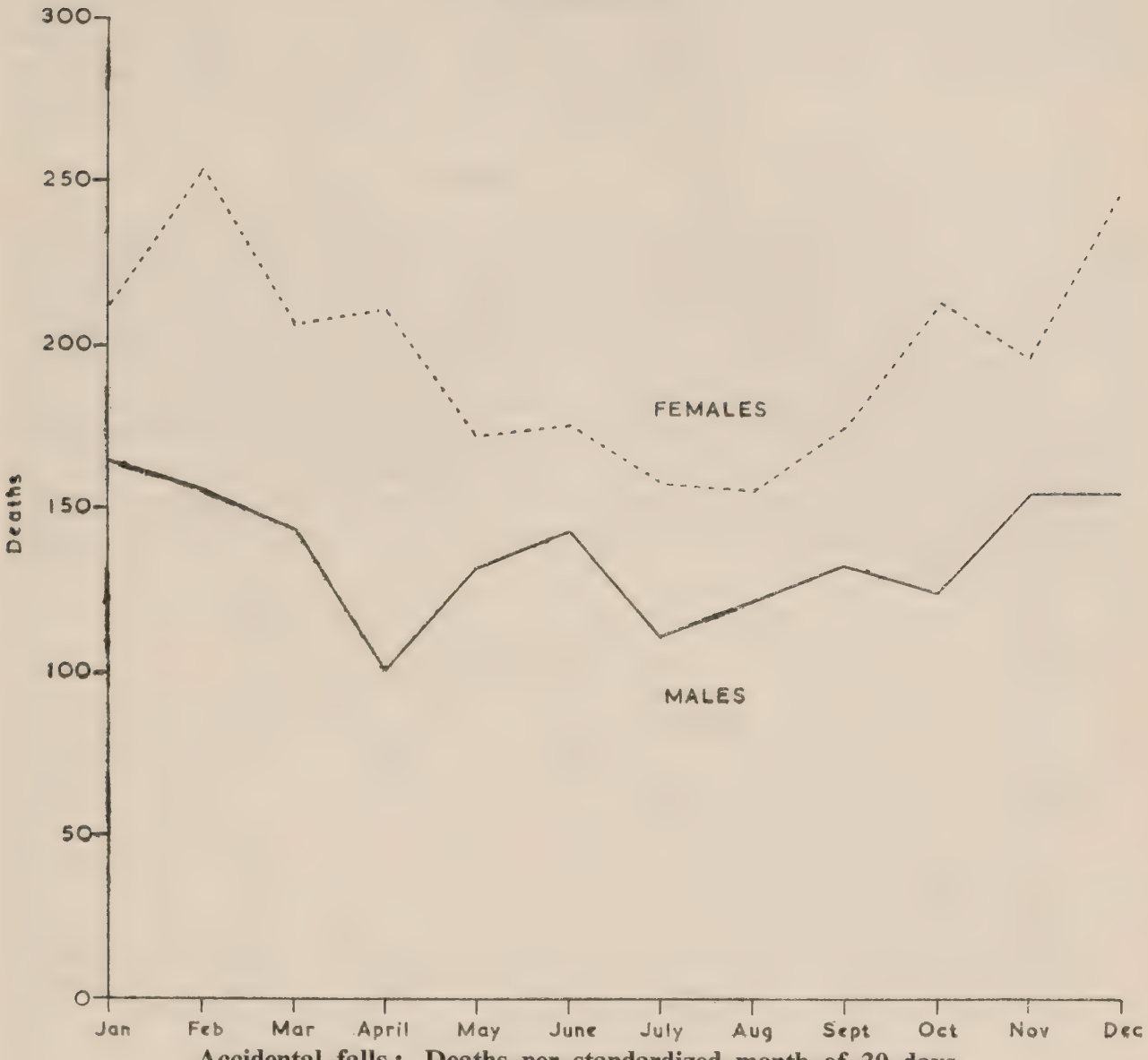
Suicides

The annual number of males committing suicide decreased from 3,053 in 1949 to 2,788 in 1952; 1,550 women also took their lives in that year, compared with 1,697 in 1949.

Table XCV., (page 208) shows that the suicide rate of 34 per million among youths aged 15-19 in 1952 was the highest since 1947; there was an increase also in the women's rates in this age-group from 9 in 1951 to 11 in 1952. There was no increase in female rates at other ages, but, while male rates decreased at ages 45-54 and 65 and over from the 1951 rates, in the age group 55-64 the rate rose from 303 to 320.

In Diagram 23 (page 196) the rates for the last pre-war year, 1938, are compared with those for 1952. The reduction in male rates is greatest at ages 55-64, perhaps due to conditions of full employment. In 1938, the peak of female rates was at ages 55-64, but by 1952 it had shifted to ages 65-74, where also the 1952 rate was in excess of that for 1938.

Diagram 22



Accidental falls: Deaths per standardized month of 30 days

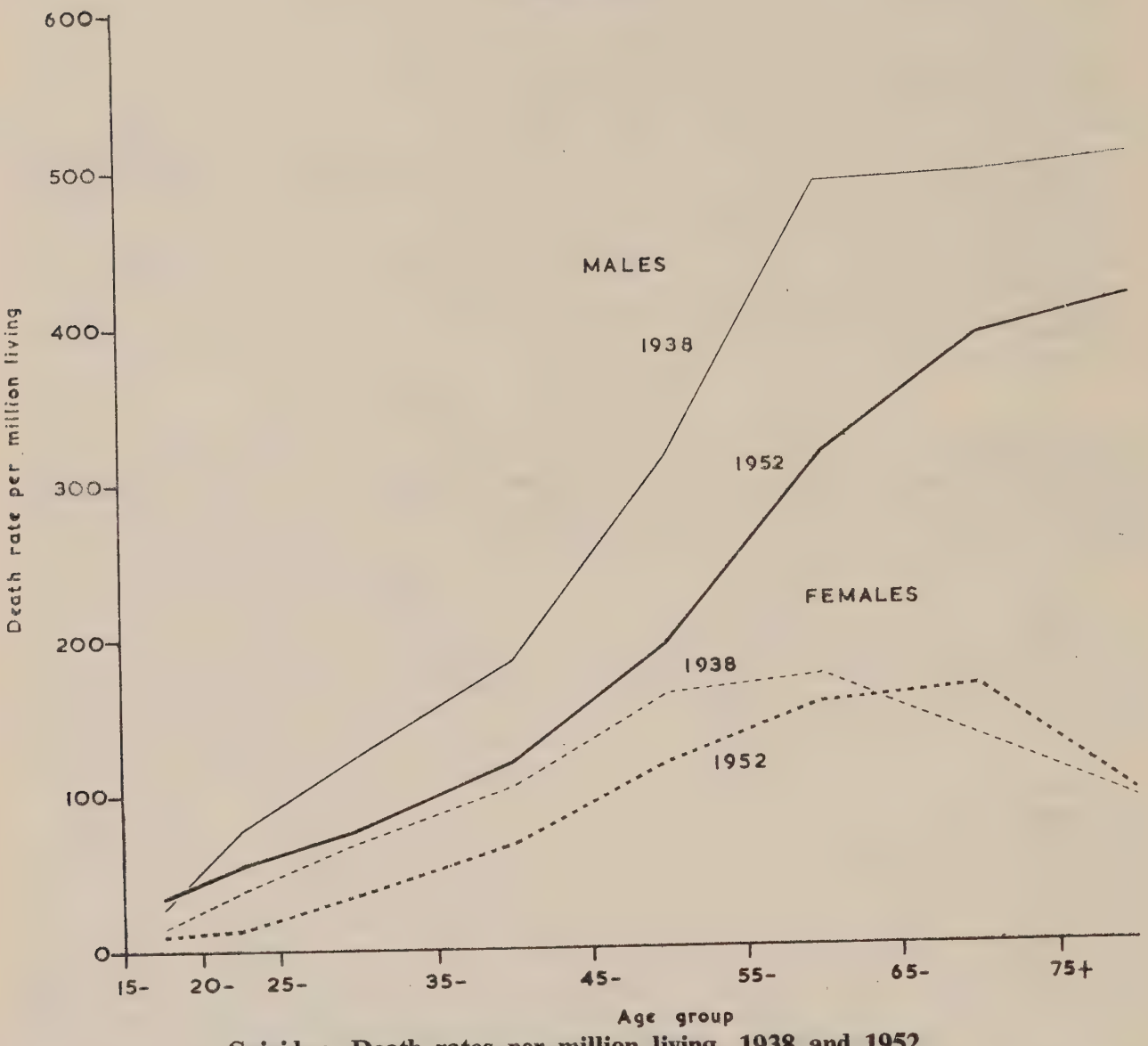
Homicides

In 1952, 102 males and 93 females died of injuries intentionally inflicted by others. The numbers so dying and the crude death rates in the period 1942 to 1952 were as follows:

		1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
Numbers ...	M	149	131	104	153	102	98	126	90	107	99	102
	F	127	116	106	134	117	124	102	115	107	83	93
Rates per million living	M	7	6	5	7	5	5	6	4	5	5	5
	F	6	5	5	6	5	6	5	5	5	4	4
Legal executions included in above numbers	M	18	17	12	17	22	10	9	15	18	14	23
	F	—	—	—	—	—	—	—	1	—	—	—
Ratio of legal executions per 100 homicides (Persons)		*6·5*	*6·9*	*5·7*	*5·9*	*10·0*	*4·5*	*3·9*	*7·8*	*8·4*	*7·7*	*11·8*

The years 1942 and 1945 were peak years for homicidal deaths; by 1951 and 1952 the numbers had fallen to 182 and 195 respectively. There was a high number of legal executions in 1952 and the percentage ratio of legal executions

Diagram 23



Suicide: Death rates per million living, 1938 and 1952

to homicides reached the peak value of 11·8. The proportion of infanticides among the deaths was 18 per cent for males and 13 per cent for females. The regional distribution of intentional deaths is shown for the years 1948-52 combined in the following table:

Standard Region	Males				Females			
	Infanticide		Others		Infanticide		Others	
	Numbers of deaths	Per cent of all homicides	Numbers of deaths	Distribution per 100 in England and Wales	Numbers of deaths	Per cent of all homicides	Numbers of deaths	Distribution per 100 in England and Wales
England and Wales ..	**91**	*18*	**404**	**100**	**65**	*13*	**433**	**100**
Northern ..	6	*16*	32	8	7	*21*	27	6
East and West Ridings ..	12	*19*	51	13	6	*14*	37	9
North Western	10	*15*	57	14	10	*14*	59	13
North Midland	6	*24*	19	5	8	*17*	38	9
Midland ..	14	*21*	53	13	4	*9*	43	10
Eastern ..	10	*28*	26	6	4	*10*	38	9
London and South Eastern	18	*16*	92	23	19	*14*	116	26
Southern ..	4	*16*	21	5	3	*11*	25	6
South Western	3	*12*	23	6	3	*10*	26	6
Wales	8	*21*	30	7	1	*4*	24	6

The Eastern and North Midland regions had the highest proportions of male infanticides, 28 and 24 per cent of total homicides respectively; girl infanticides were most frequent among intentional deaths in the Northern and North Midland regions—21 and 17 per cent. Roughly a quarter of all homicides occurred in London and the South Eastern region.

Nature of Injury (All Accidents and Violence)

Table XCVI., (page 209) shows the proportion per 1,000 violent deaths classified according to the nature of the injury involved. There was a slight decrease in the proportion of deaths from fractured skulls due to motor vehicle accidents, from 611 in 1951 to 603 in 1952 for males and from 560 to 537 for females. In other transport accidents the proportion of deaths from this cause decreased from 372 to 355 for males, but increased from 410 to 457 for females. The proportion of fatalities resulting from internal injury in 1952 exceeded that in 1951 in motor vehicle and other transport accidents, male suicides and 'others'. Among suicides in 1952 poisoning was the agent chosen by 53 per cent of men and 74 per cent of women, compared with 49 and 71 per cent in 1951.

Table LXXXIV.—Accidents and violence: Death rates per million living by sex and age, 1901 to 1952

	All ages	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males												
1901–10 ...	827	1,231	329	262	447	555	677	914	1,257	1,623	1,818	2,621
1911–20 ...	857	934	395	304	596	902	828	894	1,082	1,395	1,715	2,757
1921–30 ...	709	683	375	243	449	584	536	658	917	1,259	1,616	2,842
1931–35 ...	770	697	370	228	533	739	602	640	921	1,271	1,599	3,358
1936–40 ...	968	775	420	297	651	1,121	826	825	1,046	1,475	1,835	3,887
1941–45 ...	1,167	897	612	435	935	2,192	1,263	870	1,008	1,323	1,691	3,183
1946	622	688	328	251	414	565	453	478	582	864	1,213	2,612
1947	628	664	381	228	398	528	465	465	633	850	1,210	2,786
1948	562	585	318	179	350	458	398	406	574	844	1,136	2,320
1949	569	547	299	194	386	509	387	433	583	805	1,084	2,554
1949*	567	541	298	193	386	508	387	431	579	797	1,085	2,556
1950*	562	461	252	153	376	555	423	418	579	807	1,120	2,451
1951*	591	487	259	190	362	608	474	429	591	814	1,137	2,745
1952*	568	473	217	167	415	643	445	436	546	796	1,092	2,450
Females												
1901–10 ...	329	1,059	226	81	103	111	135	198	307	423	752	2,287
1911–20 ...	300	767	234	98	117	120	127	179	272	382	728	2,364
1921–30 ...	283	487	182	71	117	127	126	168	268	397	716	2,516
1931–35 ...	346	505	201	81	142	155	161	194	297	443	878	3,044
1936–40 ...	477	570	230	137	222	233	235	281	412	595	1,116	3,707
1941–45 ...	499	687	322	206	256	274	276	307	404	552	959	3,064
1946	326	494	149	70	83	86	116	152	225	351	661	2,725
1947	334	503	162	63	82	81	109	145	237	356	703	2,707
1948	306	434	153	63	72	76	99	137	231	347	614	2,341
1949	306	387	128	63	81	92	85	128	212	336	617	2,513
1949*	302	378	128	63	79	92	81	126	212	330	612	2,492
1950*	308	338	127	47	80	81	79	125	223	323	606	2,698
1951*	321	350	96	45	88	87	85	126	228	327	648	2,803
1952*	298	330	100	50	77	86	85	120	213	322	604	2,406

Table LXXXV.—Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1952

	Males					Females				
	0–	15–	35–	65 and over	All ages	0–	15–	35–	65 and over	All ages
1901–10 ...	3·22	12·88	7·22	2·31	5·05	2·85	3·06	2·18	1·54	2·31
1911–20 ...	3·74	15·69	7·16	2·29	5·69	2·95	2·97	2·26	1·63	2·31
1921–30 ...	4·43	15·49	7·06	2·37	5·48	3·06	4·02	2·74	1·79	2·49
1931–35 ...	5·60	20·29	7·37	2·55	6·05	4·11	5·54	3·31	2·25	3·04
1936–40 ...	7·30	29·58	8·67	2·89	7·30	5·73	9·52	4·82	2·83	4·10
1941–45 ...	10·34	46·29	9·46	2·85	9·13	8·25	12·26	5·58	2·74	4·56
1946	7·86	25·39	6·09	2·22	5·08	5·91	5·84	3·45	2·27	3·00
1947	7·65	24·86	6·09	2·14	4·89	5·86	5·53	3·55	2·22	2·97
1948	8·91	24·61	6·04	2·13	4·88	7·06	5·56	3·70	2·18	3·02
1949	9·47	27·04	5·87	1·96	4·62	7·02	5·80	3·34	2·01	2·72
1950	9·20	30·36	5·93	1·94	4·56	7·24	6·59	3·44	2·13	2·80
1951	10·22	34·74	5·68	1·85	4·42	7·36	8·21	3·42	2·06	2·73
1952	10·28	37·65	5·97	1·91	4·65	7·67	9·46	3·58	2·11	2·84

* According to the 6th Revision of the International Classification. Other years according to the classification in use at the time.

Table LXXXVI.—Motor vehicle accidents: Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1931 to 1952

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	C.M.I. (1938 =1·00)
Males												
1931–35 ...	208	184	93	204	368	210	133	153	206	363	678	**1·12**
1936–40 ...	216	159	86	176	363	209	152	171	257	411	749	**1·01**
1941–45 ...	199	198	113	152	227	193	149	160	228	353	556	**0·92**
1946	153	144	109	161	205	139	109	102	160	241	498	**0·73**
1947	146	134	75	127	209	139	106	111	147	246	460	**0·70**
1948	126	135	63	122	173	112	79	97	142	194	400	**0·60**
1949	140	123	80	147	226	117	103	101	137	229	451	**0·67**
1949*	142	126	83	150	232	118	105	101	138	232	454	**0·68**
1950*	151	104	60	177	279	164	106	102	153	242	439	**0·72**
1951*	161	112	88	178	308	174	112	117	160	231	505	**0·77**
1952*	149	105	73	165	301	150	123	105	144	219	403	**0·71**
Females												
1931–35 ...	68	106	34	49	50	31	29	49	95	181	267	**1·17**
1936–40 ...	64	84	30	49	48	29	27	45	85	173	279	**1·02**
1941–45 ...	56	106	42	42	40	29	26	37	61	107	172	**0·86**
1946	47	72	30	36	27	21	20	27	56	100	185	**0·70**
1947	47	71	26	37	23	17	22	33	54	100	177	**0·69**
1948	43	79	31	25	16	14	19	21	49	101	157	**0·64**
1949	41	65	32	32	30	10	16	22	44	95	151	**0·60**
1949*	41	66	32	32	30	10	16	22	44	95	151	**0·61**
1950*	46	64	25	40	30	17	19	35	48	84	200	**0·67**
1951*	49	58	22	47	37	19	23	35	54	101	198	**0·71**
1952*	42	52	21	34	31	19	18	28	43	94	168	**0·62**

* According to the 6th Revision of the International Classification (Nos. E810–835). Other years according to the classification in use at the time.

Table LXXXVII.—Motor vehicle accidents (E810-835): Death rates per million living by sex and age in standard regions and population density aggregates, 1952

(based on deaths assigned according to area of normal residence)

	Males					Females				
	0–	15–	45–	65 and over	All ages	0–	15–	45–	65 and over	All ages
ENGLAND AND WALES	96	166	121	276	149	43	23	35	120	42
Conurbations (excluding Greater London)	122	127	112	287	136	47	21	45	130	45
Greater London	58	116	80	324	112	26	21	36	142	41
Areas outside conurbations	99	193	136	263	164	46	24	32	112	42
Urban areas with populations of 100,000 and over	100	124	103	222	122	56	18	39	127	45
Urban areas with populations of 50,000 and under 100,000	101	159	103	297	145	*31*	*7*	*20*	104	28
Urban areas with populations under 50,000 ...	95	168	127	271	151	47	21	23	116	40
Rural areas	101	272	183	265	212	44	38	43	99	49
Regions:										
Northern	120	180	147	243	163	66	*17*	*39*	*73*	40
East and West Ridings ...	108	145	114	247	138	*37*	28	*35*	131	44
North Western	124	157	137	273	155	51	18	38	128	44
North Midland	114	168	146	314	163	55	*18*	*21*	111	38
Midland	107	203	128	361	175	43	24	*34*	149	44
Eastern	72	195	137	220	155	*41*	37	*30*	103	45
South East (excluding Greater London) ...	*59*	186	124	241	147	*48*	*25*	*31*	101	43
Southern	75	197	118	290	161	*34*	*31*	*32*	*91*	40
South Western	115	198	133	221	166	*40*	*15*	*45*	124	44
Wales	112	164	109	246	146	*45*	*24*	*45*	*121*	46

Table LXXXVIII.– Deaths of pedestrians, pedal cyclists, motor cyclists, motor vehicle occupants and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents and other road vehicle accidents, by sex, 1936-40, 1941-45 and 1946 to 1952

	1936–40 (Annual average)		1941–45 (Annual average)		1946		1947		1948		1949		1950		1951		1952	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Pedestrians :																		
Motor vehicle traffic accidents	2,148	1,010	2,073	898	1,404	714	1,339	712	1,210	720	1,214	674	1,140	726	1,302	725	1,099	663
Motor vehicle non-traffic accidents											13	2	32	6	43	10	54	8
Other road vehicle accidents	194	79	166	70	82	42	77	50	89	45	67	51	76	51	59	43	73	31
Pedal cyclists :																		
Motor vehicle traffic accidents	777	131	557	140	481	97	417	81	461	86	496	78	475	80	473	80	443	74
Motor vehicle non-traffic accidents											—	—	1	—	—	—	—	—
Other road vehicle accidents	249	44	230	51	159	30	160	25	158	30	157	30	168	31	160	18	125	31
Motor cyclists :																		
Motor vehicle traffic accidents	1,018	77	651	27	681	46	696	62	520	26	733	56	979	79	1,019	94	1,002	78
Motor vehicle non-traffic accidents											6	—	7	—	3	—	10	1
Motor vehicle occupants and others :																		
Motor vehicle traffic accidents	631	191	762	167	592	178	583	181	474	141	498	118	505	150	499	200	469	143
Motor vehicle non-traffic accidents											50	1	48	2	57	5	70	3
Other road vehicle accidents	36	3	47	11	24	8	28	4	20	5	32	7	50	13	19	7	31	14

Table LXXXIX.—Deaths caused by road accidents involving various types of vehicles, 1942 to 1952

1938 Int. List No.	Type of accident		1942	1943	1944	1945	1946	1947	1948	1949	1950*	1951*	1952*
170c (part)	*Motor vehicle accident causing death of pedestrian by:*												
	Motor goods vehicle ..	M.	950	792	956	703	517	507	503	496	414	446	420
		F.	439	386	481	355	251	265	307	267	258	244	222
	Motor bus, trolley bus ..	M.	587	466	437	287	248	239	228	190	146	160	140
		F.	225	187	194	157	150	136	134	90	87	93	78
	Motor car, coach, motor cycle	M.	622	425	462	446	619	573	460	535	562	672	524
		F.	212	170	222	249	304	309	273	317	372	377	347
	Other road motor vehicle (including collision unspecified)	M.	31	35	50	18	20	20	19	6	18	24	15
		F.	18	13	14	12	9	2	6	6	9	11	16
170c (part)	*Motor vehicle non-collision accident causing death of occupant or rider of:*												
	Motor cycle	M.	244	155	129	145	287	253	210	261	164	261	280
		F.	14	—	4	8	19	24	12	24	14	30	25
	Motor goods vehicle ..	M.	308	282	289	224	187	131	124	140	95	91	122
		F.	24	13	15	23	11	12	11	10	7	13	7
	Motor bus, trolley bus ..	M.	67	80	43	56	43	38	43	43	46	51	39
		F.	58	40	47	59	32	38	35	23	23	25	30
	Motor car, coach ..	M.	69	65	49	101	110	133	60	82	52	60	85
		F.	27	16	14	37	55	57	25	23	19	36	30
	Other road motor vehicles	M.	5	14	12	8	9	7	8	4	—	3	—
		F.	—	3	7	3	2	2	5	—	—	1	—
170a	Collision between motor vehicle and train	M.	6	21	11	22	9	19	19	7	13	8	10
		F.	—	4	1	1	—	2	2	—	2	2	1
170b, 170c (part)	*Other collision involving a motor vehicle causing death of:*												
	Pedal cyclist by:—												
	Motor goods vehicle ..	M.	280	238	324	229	200	187	192	197	214	182	170
		F.	68	75	105	56	42	30	43	43	43	33	32
	Motor bus, trolley bus	M.	86	83	69	69	56	61	78	72	47	57	56
		F.	20	11	19	17	12	9	11	6	7	4	8
	Motor car, coach, motor cycle	M.	195	120	149	167	220	167	189	217	208	228	212
		F.	41	35	43	31	42	41	31	29	30	42	34
	Other road motor vehicle	M.	6	7	20	10	5	2	2	4	6	6	5
		F.	1	1	4	3	1	1	1	—	—	1	—
	Motor cyclist	M.	514	273	307	286	391	443	309	484	815	758	722
		F.	19	13	8	17	27	38	13	33	65	64	53
	Occupant of other road vehicle	M.	271	201	258	249	216	242	209	219	295	282	204
		F.	74	27	44	65	78	70	64	56	97	123	73
170c (part)	*Ill-defined motor vehicle accident causing death of:*												
	Other or unspecified person	M.	—	—	9	17	21	13	12	8	4	4	9
		F.	—	—	—	1	—	—	—	—	2	—	2
	Total motor road vehicle fatalities	**M.**	**4,241**	**3,257**	**3,574**	**3,037**	**3,158**	**3,035**	**2,665**	**2,965**	**3,099**	**3,293**	**3,013**
		F.	**1,240**	**994**	**1,222**	**1,094**	**1,035**	**1,036**	**973**	**927**	**1,035**	**1,099**	**958**

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Table LXXXIX.—*continued.*

1938 Int. List No.	Type of accident		1942	1943	1944	1945	1946	1947	1948	1949	1950*	1951*	1952*
171	*Road transport accidents involving only non-motor vehicles, causing death of:—*												
	Pedestrian by:												
	Tramcar	M.	67	70	51	33	19	17	26	9	18	8	5
		F.	26	32	24	21	22	12	11	13	8	10	4
	Pedal cycle	M.	67	68	57	34	41	45	54	45	47	40	56
		F.	28	39	26	30	14	33	31	36	39	29	23
	Other non-motor vehicle	M.	45	40	48	28	22	15	9	13	11	11	12
		F.	11	11	7	13	6	5	3	6	4	4	4
	Pedal cyclist by:—												
	No other vehicle ..	M.	222	242	208	168	141	143	140	149			
		F.	53	63	37	39	27	24	24	27			
	Tramcar	M.	—	2	1	—	2	3	—	2	168	160	125
		F.	—	—	—	1	1	—	1	—	31	18	31
	Other non-motor vehicle	M.	21	15	21	14	16	14	18	20			
		F.	4	7	8	8	2	1	5	1			
	Occupant of tramcar ..	M.	14	13	7	9	10	7	6	6	3	4	3
		F.	3	13	7	7	5	3	3	3	—	—	1
	Occupant of other non-motor vehicle	M.	41	37	35	33	14	21	14	12	47	15	28
		F.	4	3	5	3	3	1	2	2	13	7	13
	Total non-motor road vehicle fatalities	M.	**477**	**487**	**428**	**319**	**265**	**265**	**267**	**256**	**294**	**238**	**229**
		F.	**129**	**168**	**114**	**122**	**80**	**79**	**80**	**88**	**95**	**68**	**76**
170 and 171	**Total pedestrians .. ..**	M.	2,369	1,896	2,061	1,549	1,486	1,416	1,299	1,294	1,216	1,361	1,172
		F.	959	838	968	837	756	762	765	735	777	768	694
	Total pedal cyclists	M.	810	707	792	657	640	577	619	661	643	633	568
		F.	187	192	216	155	127	106	116	106	111	98	105
	Total motor cyclists	M.	758	428	437	431	681	696	520	745	979	1,019	1,002
		F.	33	13	12	25	46	62	26	57	79	94	78
	Total occupants of motor vehicles	M.	717	658	651	647	564	558	459	488			
		F.	180	102	125	188	176	180	140	112			
	Total occupants of non-motor vehicles	M.	64	55	52	54	30	40	22	23	555	518	500
		F.	10	17	15	10	10	5	6	5	163	207	157
	Total other or unspecified persons	M.	—	—	9	18	22	13	13	10			
		F.	—	—	—	1	—	—	—	—			

* For years 1950 to 1952 deaths from motor vehicle accidents occurring elsewhere than on a public highway are excluded from this Table. For those years the deaths shown have been estimated from available material based on the 6th Revision of the International Classification.

Table XC.—Air transport accidents: Death rates per million living by sex and age, 1931 to 1952

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males											
1931–35	2·84	*0·07*	*0·23*	*1·88*	12·59	7·42	*1·88*	*0·17*	*0·22*	*0·40*	—
1936–40	8·47	*0·21*	*0·26*	*10·92*	45·47	15·95	*5·73*	*1·52*	*0·51*	*0·17*	*1·02*
1941–45	*0·95*	—	—	*1·02*	*2·15*	*2·78*	*1·06*	*0·49*	*0·10*	*0·16*	—
1946	*0·73*	—	—	*1·32*	*0·62*	*2·14*	*1·20*	*0·39*	—	—	—
1947	6.96	*0·31*	—	*3·40*	37·01	19·30	*3·59*	*1·15*	*1·49*	—	—
1948	9·91	*0·30*	*0·71*	*6·17*	38·12	29·88	6·82	*4·85*	*1·48*	*0·73*	—
1949	8·99	*0·59*	—	*6·27*	34·02	26·09	8·55	*3·64*	*1·48*	—	—
1950	10·86	—	—	*12·63*	37·01	31·05	8·87	7·09	*3·43*	*1·45*	—
1951	12·97	*0·28*	—	*8·25*	50·11	47·65	7·91	*2·78*	*1·97*	*1·46*	—
1952	13·78	—	*3·50*	29·30	67·00	38·00	8·36	*1·36*	*0·98*	—	*1·61*
.. ..											
Females											
1931–35	*0·18*	—	—	*0·13*	*0·34*	*0·47*	*0·33*	*0·08*	—	*0·16*	—
1936–40	*0·27*	*0·21*	—	*0·59*	*0·37*	*0·51*	*0·51*	—	*0·09*	—	—
1941–45	*0·15*	—	—	*0·13*	*0·70*	*0·30*	*0·18*	—	*0·08*	—	—
1946	*0·05*	—	—	—	—	*0·30*	—	—	—	—	—
1947	*0·40*	*0·32*	—	*0·69*	*0·64*	*0·30*	*0·29*	*1·01*	—	*0·57*	—
1948	*0·85*	—	*0·73*	*1·41*	*2·61*	*1·21*	*1·46*	*1·00*	—	—	—
1949	*0·84*	*0·61*	*2·16*	*2·13*	*0·66*	—	*0·88*	*1·97*	*0·40*	—	—
1950	*0·44*	—	—	—	*1·33*	*1·55*	*0·29*	*0·65*	—	—	—
1951	1·01	—	—	—	*3·36*	*2·17*	*0·89*	*0·64*	*1·18*	*0·53*	*2·05*
1952	0·88	*0·29*	—	3·65	*4·08*	*1·24*	—	*0·95*	*0·39*	—	—

Table XCI.—Accidental poisoning: Numbers of deaths according to the poisoning agent, and percentage distribution according to place of occurrence of the accident, 1949 to 1952

Poisoning agent		Number of deaths					Percentage distribution				
		Home	Mine or quarry	Industrial places	Other	Total	Home	Mine or quarry	Industrial places	Other	Total
Barbiturates ..	1949	42	—	—	36	78	*54*	—	—	*46*	*100*
	1950	71	—	—	56	127	*56*	—	—	*44*	*100*
	1951	59	—	—	58	117	*50*	—	—	*50*	*100*
	1952	79	—	—	61	140	*56*	—	—	*44*	*100*
Aspirin	1949	13	—	—	14	27	*48*	—	—	*52*	*100*
	1950	17	—	—	14	31	*55*	—	—	*45*	*100*
	1951	25	—	—	12	37	*68*	—	—	*32*	*100*
	1952	22	—	—	28	50	*44*	—	—	*56*	*100*
Other drugs	1949	22	—	—	14	36	*61*	—	—	*39*	*100*
	1950	20	—	—	7	27	*74*	—	—	*26*	*100*
	1951	36	—	1	7	44	*82*	—	*2*	*16*	*100*
	1952	32	—	—	12	44	*73*	—	—	*27*	*100*
Corrosives ..	1949	6	—	—	8	14	*43*	—	—	*57*	*100*
	1950	14	—	—	10	24	*58*	—	—	*42*	*100*
	1951	10	—	1	6	17	*59*	—	*6*	*35*	*100*
	1952	7	—	—	6	13	*54*	—	—	*46*	*100*
Other solids and liquids ..	1949	19	—	1	20	40	*47*	—	*3*	*50*	*100*
	1950	24	—	2	20	46	*52*	—	*4*	*44*	*100*
	1951	24	—	2	23	49	*49*	—	*4*	*47*	*100*
	1952	25	—	1	22	48	*52*	—	*2*	*46*	*100*
Utility gas ..	1949	385	1	14	23	423	*91*	*0*	*3*	*6*	*100*
	1950	389	—	4	13	406	*96*	—	*1*	*3*	*100*
	1951	459	—	8	48	515	*89*	—	*2*	*9*	*100*
	1952	461	—	10	27	498	*93*	—	*2*	*5*	*100*
Other carbon monoxide ..	1949	7	1	9	6	23	*31*	*4*	*39*	*26*	*100*
	1950	6	1	24	6	37	*16*	*3*	*65*	*16*	*100*
	1951	11	—	11	8	30	*37*	—	*37*	*26*	*100*
	1952	20	—	8	11	39	*51*	—	*21*	*28*	*100*
Other gases ..	1949	4	3	7	7	21	*20*	*14*	*33*	*33*	*100*
	1950	6	8	6	—	20	*30*	*40*	*30*	—	*100*
	1951	3	1	4	3	11	*27*	*9*	*37*	*27*	*100*
	1952	1	—	6	4	11	*9*	—	*55*	*36*	*100*

Table XCII.—Accidental falls: Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1901-45 and 1946 to 1952

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	C.M.I.† (1938 =1·00)
Males												
1901–10	84	45	25	23	24	39	69	119	209	420	1,253	**1·06**
1911–20	107	38	30	39	36	56	93	155	254	454	1,373	**1·29**
1921–30	85	25	18	31	31	37	56	93	161	352	1,306	**0·92**
1931–35	93	25	18	31	33	37	47	79	146	338	1,609	**0·92**
1936–40	120	31	24	34	40	51	58	95	177	414	1,910	**1·05**
1941–45	109	35	26	40	30	41	58	87	157	337	1,448	**0·93**
1946	86	27	21	25	26	30	43	57	107	245	1,203	**0·73**
1947	97	31	26	33	42	36	50	68	108	254	1,352	**0·80**
1948	80	27	22	22	27	37	41	49	85	211	1,122	**0·66**
1949	78	20	18	28	31	33	38	57	68	185	1,162	**0·63**
1949*	79	25	18	27	28	32	35	55	71	191	1,174	**0·66**
1950*	74	14	18	19	25	29	34	50	71	183	1,139	**0·61**
1951*	86	17	17	17	34	35	40	51	85	241	1,275	**0·71**
1952*	79	16	17	23	30	30	30	47	78	221	1,169	**0·64**
Females												
1901–10	68	27	*6*	*4*	*4*	10	26	64	132	389	1,657	**0·88**
1911–20	69	20	*6*	*5*	*5*	8	20	50	108	356	1,752	**0·83**
1921–30	73	13	*4*	*4*	*4*	*5*	10	31	85	318	1,845	**0·75**
1931–35	100	14	*5*	*3*	*3*	6	8	30	92	388	2,283	**0·90**
1936–40	136	18	*6*	*4*	*5*	6	12	34	123	476	2,714	**1·11**
1941–45	118	17	*8*	*5*	*6*	*6*	11	26	81	346	2,135	**0·85**
1946	110	15	*4*	*3*	*5*	*6*	6	11	59	260	2,037	**0·76**
1947	111	11	*7*	*9*	*4*	*4*	*5*	15	58	286	1,947	**0·75**
1948	100	11	*4*	*4*	*4*	*3*	*4*	18	51	231	1,726	**0·66**
1949	105	10	*6*	*3*	*2*	*2*	*4*	13	50	232	1,840	**0·69**
1949*	105	12	*6*	*4*	*1*	*2*	*5*	15	51	230	1,822	**0·69**
1950*	113	8	*2*	*2*	*1*	*3*	*5*	14	45	230	1,994	**0·73**
1951*	117	9	—	*2*	*5*	*3*	*3*	12	46	240	2,034	**0·75**
1952*	105	9	*2*	*2*	*5*	*2*	*5*	11	44	218	1,743	**0·66**

* According to the 6th Revision of the International Classification (Nos. E900–904). Other years according to the classification in use at the time.

† C.M.I's. are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table XCIII.—Accidental falls (E900-904): Annual average of deaths and percentage distribution by place of occurrence, 1949-52*

		Home	Farm, mine or industrial premises	Place for recreation or sport	Other	Total
From one level to another ...	Deaths	1,236	299	13	247	1,795
	Per cent of total	*68*	*17*	*1*	*14*	*100*
On the same level	Deaths	1,224	21	6	330	1,581
	Per cent of total	*78*	*1*	*0*	*21*	*100*
Unspecified	Deaths	514	7	1	281	803
	Per cent of total	*64*	*1*	*0*	*35*	*100*

* Excluding non-civilians for 1949 only

Table XCIV.—Accidental falls (E900-904): Death rates per million living by sex and age in conurbations and population density aggregates, 1952

		All ages	0–	5–	15–	25–	35–	45–	55–	65–	75 and over
ENGLAND AND WALES ...	**M.**	**79**	**22**	**13**	**26**	**30**	**30**	**47**	**78**	**221**	**1,169**
	F.	**105**	**15**	***3***	***4***	***2***	***5***	**11**	**44**	**218**	**1,743**
Conurbations:											
Tyneside	M.	110	—	—	*60*	*49*	*17*	*107*	*256*	*231*	*1,500*
	F.	317	*29*	—	—	—	*16*	*34*	*64*	*576*	7,467
West Yorkshire	M.	111	*15*	*18*	*72*	*43*	*24*	*50*	*36*	*315*	2,000
	F.	253	*47*	*9*	—	—	*8*	*22*	*45*	*207*	5,324
South East Lancashire ...	M.	73	*40*	*18*	*24*	*41*	*27*	*36*	*137*	*230*	815
	F.	66	—	*6*	*7*	*6*	*5*	*16*	*45*	313	766
Merseyside	M.	104	*16*	*26*	*49*	*126*	*21*	*118*	*119*	*297*	*1,133*
	F.	363	*81*	—	*10*	—	—	*21*	*26*	*196*	9,538
West Midlands	M.	71	*10*	*17*	*24*	*17*	*23*	*68*	*72*	*254*	1,240
	F.	134	*11*	—	—	—	*6*	*19*	*50*	321	2,950
Greater London	M.	83	*31*	*9*	*23*	*28*	33	47	69	238	1,456
	F.	41	*13*	—	*2*	—	*4*	*6*	44	193	417
Areas outside the conurbations:											
Urban areas with populations of 100,000 and over	M.	83	*28*	*17*	*35*	*31*	*33*	*48*	98	203	1,253
	F.	84	*4*	—	*5*	*2*	—	*7*	64	183	1,437
Urban areas with populations of 50,000 and under 100,000	M.	84	*15*	*8*	*30*	*21*	*29*	*49*	*45*	236	1,388
	F.	98	—	*9*	—	—	—	*12*	*40*	174	1,565
Urban areas with populations under 50,000	M.	80	*21*	*16*	*22*	31	33	41	73	219	1,088
	F.	143	*22*	*6*	*3*	*5*	*4*	*12*	43	243	2,321
Rural areas	M.	63	*17*	*9*	*17*	*17*	*29*	*34*	55	183	855
	F.	52	*9*	*2*	*6*	*4*	*10*	*9*	*30*	177	611

Table XCV.—Suicide: Death rates per million living by sex and age, and Comparative Mortality Indices by sex, 1901-45 and 1946 to 1952

	All ages	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	C.M.I.* (1938 =1·00)
Males												
1901–10	157	*1*	*4*	36	91	152	252	397	523	508	382	**1·17**
1911–20	130	—	*3*	32	69	122	196	278	389	405	350	**0·90**
1921–30	166	—	*2*	31	78	111	211	346	487	513	438	**1·04**
1931–35	196	*0*	*2*	40	96	140	210	379	542	533	483	**1·14**
1936–40	172	—	*2*	32	89	118	177	284	462	477	466	**0·95**
1941–45	126	—	*3*	43	72	100	128	185	271	347	382	**0·66**
1946	138	—	*5*	31	49	94	154	200	300	391	465	**0·72**
1947	136	—	*3*	35	59	94	123	209	314	382	480	**0·71**
1948	144	—	*2*	29	73	86	134	219	338	469	388	**0·76**
1949	144	—	*1*	32	60	80	134	236	334	422	490	**0·76**
1950	136	—	*1*	30	60	70	122	222	323	416	421	**0·71**
1951	135	—	*6*	24	53	78	120	213	303	410	477	**0·70**
1952	132	—	*1*	34	55	78	120	198	320	389	413	**0·69**
Females												
1901–10	49	—	*3*	34	45	56	81	109	108	88	*49*	**0·75**
1911–20	47	—	*2*	30	41	50	74	100	102	81	*52*	**0·69**
1921–30	63	—	*1*	25	43	57	87	135	143	108	63	**0·84**
1931–35	80	—	*0*	23	49	77	108	154	166	134	84	**1·01**
1936–40	79	—	*1*	14	38	65	99	155	169	142	89	**0·98**
1941–45	62	—	*1*	*9*	22	52	77	108	128	117	73	**0·74**
1946	74	—	*1*	15	26	53	87	135	157	146	92	**0·89**
1947	76	—	—	*10*	28	51	80	134	160	166	114	**0·90**
1948	78	—	—	*11*	20	50	80	141	183	173	98	**0·93**
1949	75	—	*1*	15	26	45	77	127	165	165	138	**0·89**
1950	70	—	*1*	*10*	23	34	75	124	157	153	115	**0·82**
1951	72	—	—	*9*	20	38	66	135	160	167	105	**0·84**
1952	68	—	*1*	*11*	*12*	35	66	118	154	164	97	**0·79**

* C.M.I's. are based on civilian deaths and civilian populations for the years 1940–1949 inclusive.

Table XCVI.—Proportion of deaths per 1,000 violent deaths according to nature of injury, 1952

		Fracture of skull	Fracture of spine or trunk	Fracture of limb	Head injury other than fracture	Internal injury	Laceration and open wounds	Poisoning	Others	Total
Motor vehicle accidents ...	M.	603	66	42	115	129	10	—	35	1,000
	F.	537	86	70	144	101	18	—	44	1,000
Other transport accidents ...	M.	355	65	38	77	162	75	2	226	1,000
	F.	457	43	43	93	136	80	—	148	1,000
Falls	M.	324	121	353	100	37	10	—	55	1,000
	F.	89	69	699	75	12	6	—	50	1,000
Suicide or self-inflicted injury ...	M.	24	6	1	39	13	86	528	303	1,000
	F.	10	7	1	4	3	26	735	214	1,000
Others	M.	93	54	12	36	84	31	171	519	1,000
	F.	12	3	17	12	11	14	281	650	1,000

MISCELLANEOUS

Infectious Diseases—deaths occurring a long period after onset

The rules for classification, embodied in the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948, state that "when an acute infective disease classified in categories 040-043, 050, 055, 056, 058, 084-087, 100-108 is certified as the underlying cause of some other condition and the interval between its onset and death is stated to be one year or more, it is recommended that such deaths should be appropriately identified in tabulation". This practice has been followed in England and Wales, and the deaths in question in 1952 are separately tabulated below. Six infectious diseases were involved, Typhoid (4 deaths), Scarlet Fever (15 deaths), Diphtheria (9 deaths), Whooping Cough (3 deaths), Smallpox (1 death), and Brill's Disease (1 death).

Age at death	Interval between onset of infectious disease and death (years)					
	1–4	5–9	10–19	20–29	30–39	40 and over
			Typhoid fever (040)			
65 and over	—	—	—	—	—	4
			Scarlet fever (050)			
5–14	1	—	—	—	—	—
15–44	3	2	1	—	—	—
45–64	—	—	—	1	—	2
65 and over	—	—	—	—	—	5
			Diphtheria (055)			
15–44	—	1	1	1	3	—
45–64	—	—	1	—	—	1
65 and over	—	—	—	—	—	1
			Whooping cough (056)			
15–44	—	—	1	—	—	—
45–64	2	—	—	—	—	—
			Smallpox (084)			
45–64	—	—	—	1	—	—
			Brill's disease (102)			
45–64	1	—	—	—	—	—

Details of age, sex, other conditions on death certificate, and interval (in years) since onset of the infectious disease, in that order, are :—

Typhoid fever

71	M.	Stricture of œsophagus	40
71	F.	Congestive heart failure; endocarditis	(when a young woman)
72	F.	Acute intestinal obstruction	(old typhoid fever perforation)
80	F.	Myocarditis; mitral incompetence	60

Scarlet fever

13	F.	Uræmia; chronic parenchymatous nephritis; hyperpiesis	3
16	M.	Congestive cardiac failure	3
19	F.	Chronic glomerulo nephritis	7
22	F.	Uræmia; chronic nephritis	1
27	F.	Acute cardiac failure; stenosis of mitral valve with general anasarca	14
34	M.	Uræmia; nephritis and multiple arthritis	3
39	M.	Congestive cardiac failure; mitral stenosis; mild chronic bronchitis	5
47	F.	Mitral stenosis; aortic stenosis	20
52	F.	Aortic stenosis	(in childhood)
63	M.	Chronic myocarditis; arteriosclerosis	(childhood)
69	F.	Uræmia; chronic glomerulo-tubular nephritis ; hypochromic anæmia	(in adolescence)
70	F.	Mitral stenosis	(as a child)
73	M.	Heart disease; arteriosclerosis; carditis	(at childhood)
78	F.	Mitral stenosis and regurgitation	70
85	F.	Coronary thrombosis; rheumatic heart disease	66

Diphtheria

16	F.	Endocarditis	6
21	F.	Congestive heart failure; mitral stenosis	19
24	F.	Complete heart block; myocarditis	20
37	F.	Acute dilatation of heart; valvular heart disease	(in childhood)
39	F.	Acute heart failure; hypertrophy left ventricle	(as child)
42	F.	Aortic and mitral valvular disease	37
52	M.	Congestive heart failure; chronic valvular disease of heart	(years ago)
55	F.	Cardiac failure; chronic nephritis	10
65	F.	Stokes-Adams attack, heart block; myocarditis	(from childhood)

Whooping cough

15	M.	Congestive heart failure; hypochromic anæmia; malnutrition; post- pertussis encephalitis with resultant idiocy	14
47	M.	Œdema of larynx	1
64	F.	Myocardial degeneration; capillary bronchitis and emphysema	1

Smallpox

56	F.	Valvular disease of heart; ascites	23

Brill's disease

63	F.	Brill's syndrome	2½

Deaths following vaccination or other prophylactic inoculation

This section includes deaths classified to E940-E942, vaccinia, post-vaccinal encephalitis and other complications of smallpox vaccination, and to E943, E944, post-immunization jaundice and hepatitis and other complications of prophylactic inoculation. There were no deaths with vaccination mentioned, but which were classified to other conditions.

In 1952 four deaths were assigned to complications of vaccination against smallpox, viz :—

1. Female, aged 3 months, certified as toxæmia due to broncho-pneumonia during generalised vaccinia.
2. Male, aged 8 months, certified as toxæmia following general vaccinia.
3. Male, aged 26 years, certified as encephalomyelitis following anti-smallpox vaccination.
4. Female, aged 6 months, certified as due to vaccinia. Subsequent enquiry showed that this infant had not herself been vaccinated, but was an eczematous child whose mother had been vaccinated.

In addition there was one death assigned to other complications of prophylactic inoculation:—

1. Female, aged 2 years, certified as septicæmia due to an abscess of the shoulder following an injection for the prevention of whooping cough.

Fatal therapeutic misadventures

The classification of causes of death is based on selecting 'the disease or injury which started the train of morbid events which led directly to death'. If an operation or other treatment is said to have caused death, the assignment will normally be to the disease for which the treatment was given, and primary tabulations will be based on this, therapeutic misadventures (see Nos. E950-959 in the International Statistical Classification) being shown in secondary tabulations. Sometimes the underlying disease is not known, in which case the death has to be primarily classed to 'Therapeutic Misadventure'. Experience shows that the range of misadventures is a wide one covering, for example, cases in which

(*a*) treatment was grossly wrong, as attested by Coroners' reports, and including
  (I) unintentional overdose,
  (II) wrong drug given in error,
  (III) mention of negligence or carelessness,
  (IV) anæsthetic explosion;

(*b*) treatment failed because of technical misadventure, as for example air embolism through an accidental perforation;

(*c*) the patient reacted in an untoward way, as by drug sensitivity or anaphylactic shock.

It was felt that some distinction should be made between these types of misadventure, and various experiments in coding have been made, the object being to give a realistic picture while avoiding the intrusion of the coders' personal judgment on the cases.

The records of 164 cases were examined, but 15 were rejected either because there had not, in fact, been a therapeutic misadventure, or because compared with the other items recorded the misadventure had played a negligible part in causing death. From the consideration of these 149 cases a tentative classification was made under three headings, and new coding rules devised as follows:—

(*a*) Deaths due to error, negligence, accidents etc. should be coded to 'Violence' (i.e. poisoning etc.) as the primary code and secondarily to therapeutic misadventure.

(*b*) Deaths following operations and anæsthesia should be coded simply to the disease for which the operation was performed.

(*c*) Deaths due to technical mishaps or adverse reactions from injections, insufflations, transfusions, drugs, electro-convulsive therapy, radiation or diathermy should be coded primarily to the disease for which treatment was given and secondarily to therapeutic misadventure.

These rules will operate from mid-1953. Meanwhile, the following analysis has been made of the 149 cases mentioned, based on a distinction between technical accidents intrinsic in the treatment (48 cases or 32 per cent) and adverse reactions on the part of patients (101 cases or 68 per cent). Of the 149 deaths, 84 were males and 65 females, their age distribution being as follows:—

	Under 1	1–	5–	15–	25–	35–	45–	55–	65–	75–	85 & over
Males	4	10	6	1	14	12	10	6	15	5	1
Females	1	3	3	6	9	10	9	13	9	2	—

The places of occurrence of the deaths were:—

General hospitals	69 males;	52 females
Nursing homes	— ,,	— ,,
Mental hospitals	11 ,,	4 ,,
Elsewhere	4 ,,	9 ,,

Of 149 deaths, 81 per cent occurred in general hospitals, and 10 per cent in mental hospitals. Air embolism was responsible for 12 out of 48 deaths in which a technical procedure was involved, and adverse reaction to drugs for 24 of the 101 deaths connected with reaction to therapy. Among the latter were five adverse reactions to insulin and four to penicillin. A summary table is appended which shows the condition presumably being treated, which in one or two cases differs from the assigned cause of death, the patient's age (females in italics), and the nature of the misadventure which occurred.

Table XCVII.—Fatal Therapeutic Misadventures: an analysis of 149 deaths in 1952 according to the type of misadventure and the assumed condition being treated, with distinction of sex and age

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Tuberculosis (002)	Air embolism	{40 52}	2	Operative shock and cardiac failure during thoracoplasty	27	1
	Puncture of liver during pneumoperitoneum			Cerebral and pulmonary thrombosis during pneumonectomy	44	1
	Pleural puncture during operation for inducing artificial pneumothorax	*28*	1	Streptomycin sensitivity	33	1
	During operation for section of pleural adhesions	29	1	Panhæmocytopenia due to thiosemicarbazone	*44*	1
	Resulting from treatment	*17*	1			
General Paralysis of Insane (025)				Reflex inhibition of heart due to laryngeal spasm whilst under anæsthetic	57	1
Malignant Neoplasms (140–199)	Air embolism			Radium necrosis of bladder	{*57* *65*}	2
	Perforation of vein during dissection of neck glands	53	1	Cocaine intolerance in catheterisation	70	1
	Empyema			Cerebral anoxia following xylocaine for ventriculography	28	1
	Perforation of œsophagus during the passage of Souttar's tube	69	1	Cerebral subdural and medullary failure following anæsthesia for mastectomy	*40*	1
	Cardiac paralysis			Shock		
	Transfusion of formaldehyde in saline	44	1	Following burst abdominal wound	66	1
	Bronchoscope in air passage	68	1	Due to blood transfusion	70	1
	Cerebral anæmia			Following operation for removal of tumour from brain	*45*	1
	Ligation of carotid artery during operation for removal of carotid body tumour	*70*	1	Uncontrolled hæmorrhage		
				Rupture of tumour in laparotomy	58	1
				Following exploratory examination of patient with pernicious anæmia	*64*	1
Benign Neoplasms (210–229)	Blast injury to lungs			Anæsthesia		
	Explosion in anæsthetic machine during hysterectomy	*46*	1	Respiratory failure due to anæsthetic for ovariectomy	*72*	1
Asthma (241)	Heart failure			Anaphylactic shock		
	Following an intra-venous injection—accidental striking of vein	59	1	Following injection of fish desensitisation material	4	1
				Caused by penicillin injections	*31*	1
				Coronary thrombosis		
				Accelerated by bronchoscopy	52	1
Toxic Diffuse Goitre (252.0)				Agranulocytosis		
				Following treatment with methyl thiouracil	*70*	1
				Cerebral damage and cardiac arrest during tracheotomy	*38*	1

Table XCVII.—*continued*

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Diabetes Mellitus (260)				Adverse reaction Insulin treatment	*68*	1
				Hypoglycæmia Resulting from a self-administered overdose of insulin	61	1
Gout (288)				Sub-acute liver necrosis Resulting from administration of atropin in course of treatment	*42*	1
Psychoses and Psychoneuroses (300 318)	Intra-cerebral hæmorrhage Cerebral vessel ruptured during pre-frontal leucotomy	*58*	1	Pulmonary œdema Resulting from insulin treatment	27 *21*	2
	Embolism Operation of cingulotomy and division of fornix	31	1	Irreversible coma and respiratory failure Insulin treatment	41 *26*	2
				Cardiac and respiratory failure and anoxia Following electro-convulsive treatment	29 44 *44*	3
				Asphyxia Due to inhalation of stomach contents following electro-convulsive therapy	*20*	1
				Fracture Sustained during electro-convulsive therapy and resulting in broncho-pneumonia	76	1
				Adverse reaction Insulin treatment	29	1
				Coronary thrombosis and ventricular hypertrophy Following electro-convulsive therapy	60 66	2
Meningitis (340.3)				Anæsthetic Administered for lumbar puncture	33	1
Diseases of Central Nervous System (350–357)				Aplastic anæmia Due to mesantoin therapy	39	1
				Massive cerebral infarction Following cerebral angiography	*52*	1
Chronic Rheumatic Heart Disease (410)	Hæmorrhage Clamp on auricle slipped during operation for mitral stenosis	*29*	1			
Arteriosclerotic and Degenerative Heart Disease (420–422)	Infection Injection of morphia given in unsterile manner	*48*	1			

Table XCVII.—*continued.*

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Other Diseases of Heart (434)	Hæmopericardium Needle penetration of coronary vein in pericardial paracentesis	42	1			
Diseases of Veins (460–468)	Circulatory failure and toxæmia Infected blood used in blood transfusion	26	1			
	Pulmonary embolism Due to femoral vein thrombosis following operation	*50*	1			
Acute Upper Respiratory Infections (470–475)				Obstruction of larynx Due to aspirin sensitivity	*5*	1
				Anuria Due to nephron lesions caused by sulphanilanide crystals	2	1
Pneumonia (493)	Air embolism Following injection of penicillin	5	1			
Other Diseases of Respiratory System (510–527)	Poisoning Consequent upon a rectal anæsthesia. In error industrial spirit was mixed with pentothal	4	1	Asphyxia and shock Due to inhalation of blood and intestinal contents following operation	5 38 *7*	3
	Transfusion Incompatible blood used during operation	*4*	1	Mediastinal emphysema During resuscitation after operation	8	1
	Air embolism Following operation for chronic abscess	47	1	Heart failure Due to anaphylactic shock, exploratory examination	32 *73*	2
	Following operation for division of intra-thoracic adhesions	37	1	Hæmorrhage Accelerated by anæsthetic prior to operation	10	1
	Collapse of lung Accidental inhalation of blood clot during operation, the result of the slipping of mouth gag	5	1	Anoxæmia and bronchial spasm Resulting from abnormal sensitivity to penicillin	3	1
Disorders of Teeth (533)				Asphyxia Caused by inhalation of blood after extraction	32	1
				Circulatory and respiratory collapse During recovery from anæsthesia	*44*	1
Diseases of Œsophagus (539)	Emphysema thoracis Perforation of œsophagus during œsophagoscopy	*70*	1			

Table XCVII.—*continued.*

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Ulcer of Stomach and Duodenum (540 and 541)	Escape of pancreatic fluid during gastrectomy	*63*	1			
	Obstruction of tracheal tube during anæsthesia	53	1			
	Pulmonary Œdema, due to blood transfusion	80	1			
	Embulos, resulting from operation	30	1			
Appendicitis (550 and 551)	Air embolism From blood transfusion	75	1	Pneumonia Accelerated by shock of appendicectomy	*4*	1
				Heart failure and ether convulsions Resulting from anæsthesia	3 8 *64*	3
				Asthma and Emphysema Resulting from operation	38	1
Hernia (560 and 561)	Acute tissue emphysema Oxygen cylinder had been connected to tracheal tube, resulting in lung rupture	*76*	1	Cardiac failure and respiratory arrest Precipitated by administration of anæsthetic	1 31 54 67 79 *9 mths* *56*	7
Diseases of Intestines and Peritoneum (570–578)				Collapse of lung Due to inhalation of vomit whilst under anæsthetic	*13*	1
				Shock Following operation	59	1
Diseases of Liver, Gallbladder and Pancreas (580–587)	Peritonitis Due to traumatic perforation of the stomach	*63*	1	Shock Due to acute pancreatitis and accelerated by administration of anæsthetic	*43*	1
				Disruption of wound Following cholecystectomy	72	1
				Shock and anæsthetic narcosis	*63*	1
				Inhalation of vomit	*39*	1
				Ventricular failure following laparotomy	*68*	1
Nephritis, with Œdema (591)				Chronic parenchymatous nephritis Due to penicillin allergy	*45*	1
Diseases of Urethra (609)	Pulmonary air embolism Operation for repair of prolapsed urethra	*63*	1	Toxic effects Amethocaine, administered preparatory to operation, entered circulation	81	1

Table XCVII.—*continued.*

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Diseases of Male Genital Organs (610–617)	Pulmonary embolus Due to operation	65	1	Convulsions Due to xylocaine intolerance—injected prior to catheterisation	87	1
				After administration of anæsthetic	1	1
				Cardiac failure—vagal inhibition Due to sensitivity to ether	1	1
				Due to anæsthetic during operation	under 1 mth. 35	2
				Collapse of lungs Due to enlarged thymus resulting from anæsthetic for operation	under 1 mth.	1
Diseases of Female Genital Organs (624, 630–637)	Air embolism During salpingectomy	*43*	1	Peripheral vascular collapse Post-operative depression of respiratory centre by morphine and nembutal	*57*	1
	Operation for tubal insufflation	*31*	1			
Abortion (650–652)	Hæmorrhage and shock Following perforation of uterus accidentally sustained during therapeutic abortion	*23*	1			
Delivery (660–678)	Post-partum hæmorrhage Accelerated by transfusion of incompatible blood	*21*	1	Cardiac failure Due to chloroform and obstetric shock	*25*	1
				Vagal inhibition Due to swabbing of genitalia preparatory to induction of labour	*32*	1
Rheumatoid Arthritis and other Conditions (722, 726)				Toxic purpura Following gold therapy, resulting in cerebral hæmorrhage	*62*	1
				Acutc yellow atrophy Due to poisoning by leucopterin phenylcinchoninic acid	*35*	1
				Myocarditis Due to agranulocytosis	69	1
				Asphyxia Due to inhalation of stomach contents following narcosis by sodium amytal	52	1
Osteomyelitis (730)				Aplastic anæmia Toxic effect of chloromycetin in bone marrow	*52*	1
				Cardiac failure Anæsthetic administered for operation	41	1

Table XCVII.—*continued.*

Assumed condition for which treated (and 1948 I.S.C. No.)	Misadventure of					
	Therapeutic procedure	Ages (Females in italics)	No. of Deaths	Reaction to therapy	Ages (Females in italics)	No. of Deaths
Congenital Malformations (750–759)	Uræmia Tying of ureter in treatment for uretero-vaginal fistula	*52*	1	Cardiac failure Due to operative shock resulting from pneumonectomy	1	1
Ill-defined and Unknown Causes (795)	Paralytic ileus Perforated intestine. Operation for anterior bone block	54	1	Anaphylactoid purpura	72	1
	Post-operative shock Operation to remove broken hypodermic needle following an injection	*1*	1	Cardiac inhibition Resulting from bronchoscopy for supposed obstruction	3 mths.	1
	Emphysema Resulting from tear in the wall of œsophagus occasioned by an endoscopy	*57*	1	Homologous serum jaundice	*45*	1
	Hæmopericardium Resulting from hypodermic needle puncture of coronary vein. Intra-cardiac injection	under 1 day	1	Broncho-pneumonia Dermatitis medicamentosa	70	1
	Pulmonary embolism Resulting from laparotomy	70	1	Status Epilepticus Caused by abnormal sensitivity to penicillin	23	1
Fractures (800–829)	General septicæmia Due to hæmolytic streptococci following operation for fractured femur	74	1	Shock and respiratory failure. Embarrassment associated with anæsthetic used to set broken elbow	*24*	1
	Cerebral œdema Due to renal failure resulting from over-medication	52	1			
Burns (942)				Anæsthetic narcosis Toxæmia due to burns during operation following scalds	2	1
Poisoning (960–979)	Broncho-pneumonia Due to wound of œsophagus caused by tube inserted for stomach-washing, consequent upon an overdose of phenobarbitone	*28*	1	Uræmia and toxæmia Following an acute attack of gastro-enteritis caused by home-made medicine	*65*	1
				Barbiturate poisoning Overdose of sedative given for excessive alcoholic drinking	49	1
				Misadventure in administration	66 *82*	2
				Soporific and analgesic drugs	*33* 55	2
Totals			48			101

Note :—The assumed cause of treatment differs in some cases from the assigned cause of death.

Deaths associated with anæsthetics

Deaths during or connected with anæsthesia are primarily classified to the disease or injury requiring the administration of an anæsthetic. All such deaths are separately distinguished and in Table XCVIII those in the period 1950-52 have been tabulated by sex and age, according to the anæsthetic agents and associated drugs employed. As in similar tables in previous Reviews the various combinations are listed as given by coroners on their certificates and no attempt has been made to group or classify the material in any way.

Previous Reviews have drawn attention to the limited value of these tabulations, partly because no accurate measure is available, for comparison, of the population exposed to risk in each category, and partly because for any particular death it is not always clear whether, or to what extent, it was connected with or due to the use of anæsthetics. Since these limitations are likely to have a selective effect on the various anæsthetics recorded, the figures in Table XCVIII should be used with caution.

Table XCVIII.—Deaths under or connected with the administration of various anæsthetics, according to sex and age, in the period 1950-52

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Amethocaine	M.	5	—	—	1	—	1	1	—	2
	F.	5	—	—	2	1	—	—	1	1
Amethocaine and novutox	M.	1	—	—	—	—	—	—	—	1
Amethocaine and omnopon	M.	1	—	—	—	—	1	—	—	—
Amethocaine and pentothal	F.	1	—	—	—	—	—	1	—	—
Amethocaine, pentothal and procaine	M.	1	—	—	—	—	1	—	—	—
Amethocaine and thiopentone	M.	1	—	—	—	—	—	—	1	—
Amethocaine, thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	1
Atropine	F.	1	1	—	—	—	—	—	—	—
Avertin and procaine	F.	1	—	—	—	—	—	—	—	1
Butyn	M.	1	—	—	—	—	—	—	1	—
	F.	2	—	—	—	—	2	—	—	—
Chloroform	M.	1	—	—	—	—	—	1	—	—
	F.	10	1	—	2	5	1	—	1	—
Chloroform and ether	M.	4	1	—	—	2	—	1	—	—
	F.	4	—	1	—	—	1	1	—	1
Chloroform, ether and ethyl chloride	M.	1	—	1	—	—	—	—	—	—
Chloroform, ether and nitrous oxide	M.	4	—	—	1	—	1	—	2	—
Chloroform, nitrous oxide and pentothal	F.	1	—	—	—	—	—	—	1	—
Cocaine	M.	5	—	—	—	—	—	—	2	3
	F.	4	—	—	—	—	—	—	2	2
Synthetic cocaine	F.	1	—	—	—	—	1	—	—	—
Cocaine and novocaine	F.	1	—	—	—	—	—	—	—	1
Cocaine, omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	1
Cocaine and pentothal	M.	1	—	—	1	—	—	—	—	—
Cocaine, pentothal and tubocurarine	M.	1	—	—	—	—	—	—	1	—
Cocaine and procaine	F.	1	—	—	—	—	—	—	—	1
Coramine and pentothal	F.	1	—	—	—	—	1	—	—	—
Curare	M.	2	—	—	—	—	—	1	—	1
Curare and cyclopropane	M.	5	—	—	—	—	1	—	2	2
	F.	6	—	—	—	—	—	1	3	2
Curare, cyclopropane, flaxedil and pentothal	M.	1	—	—	—	1	—	—	—	—
Curare, cyclopropane and intraval	F.	1	—	—	—	—	—	—	—	1
Curare, cyclopropane and pentothal	M.	26	—	—	—	1	2	5	8	10
	F.	22	—	—	1	1	2	6	5	7
Curare, cyclopropane, pentothal and tubarine	M.	1	—	—	—	—	—	—	1	—
Curare, cyclopropane and thiopentone	M.	1	—	—	—	—	—	1	—	—
	F.	2	—	—	—	—	—	1	1	—
Curare and intraval	M.	1	—	—	—	—	—	—	—	1
Curare, omnopon, pentothal and scopolamine	M.	1	—	—	—	1	—	—	—	—
Curare, omnopon, scopolamine and thiopentone	M.	1	—	—	—	—	—	—	1	—
Curare and pentothal	M.	32	—	—	1	2	5	3	11	10
	F.	24	1	1	2	2	3	4	5	6
Curare, pentothal and pethidine	M.	1	—	—	—	1	—	—	—	—
Curare, pentothal and trilene	M.	1	—	—	—	—	—	1	—	—
Curare, thiopentone and tubarine	F.	1	—	—	—	—	1	—	—	—
Cyclopropane	M.	25	2	—	1	—	2	2	6	12
	F.	24	2	—	1	—	2	6	4	9
Cyclopropane and duopentone	M.	1	—	—	—	—	—	1	—	—
Cyclopropane and flaxedil	M.	1	—	—	—	—	—	1	—	—
Cyclopropane, flaxedil and intraval	M.	2	—	—	—	—	—	—	—	2
	F.	1	—	—	—	—	—	—	1	—
Cyclopropane, flaxadil nupercaine and pentothal	M.	1	—	—	—	—	—	—	—	1
Cyclopropane, flaxadil and pentothal	M.	8	—	—	—	—	1	—	4	3
	F.	10	—	—	—	1	2	1	2	4
Cyclopropane, flaxedil, pethidine and thiopentone	M.	1	—	—	—	—	—	—	1	—
Cyclopropane, flaxedil, pethidine thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	1
Cyclopropane, flaxedil and thiopentone	M.	2	—	—	—	—	—	—	1	1
	F.	1	—	—	—	—	—	—	1	—
Cyclopropane and intraval	M.	1	—	—	—	—	—	—	1	—
Cyclopropane, intraval sodium, omnopon and scopolamine	M.	1	—	—	—	—	—	—	1	—
Cyclopropane, intraval sodium and tubocurarine	M.	1	—	—	—	—	—	—	—	1
Cyclopropane, kemithal and tubarine	F.	1	—	—	—	—	1	—	—	—
Cyclopropane, nupercaine, pentothal, scopolamine and tubocurarine	M.	1	—	—	—	—	—	—	—	1
Cyclopropane, nupercaine, pentothal and tubocurarine	F.	1	—	—	—	—	—	—	—	1
Cyclopropane, omnopon and scopolamine	M.	2	—	—	—	—	—	—	1	1

Table XCVIII.—*continued.*

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Cyclopropane, omnopon, scopolamine and thiopentone	M.	1	—	—	—	—	—	—	—	1
Cyclopropane and pentothal	M.	19	—	—	—	—	3	3	3	10
	F.	22	—	1	1	3	2	3	3	9
Cyclopropane, pentothal, thiopentone and tubarine	M.	1	1	—	—	—	—	—	—	—
Cyclopropane, pentothal and tubarine	M.	4	—	—	—	2	—	1	1	—
	F.	6	—	—	—	—	2	—	—	4
Cyclopropane, pentothal and xylocaine	F.	1	—	—	—	—	—	—	—	1
Cyclopropane and procaine	F.	1	—	—	—	—	—	—	—	1
Cyclopropane and thiopentone	M.	2	—	—	—	—	1	—	—	1
	F.	2	—	—	—	—	1	—	—	1
Cyclopropane, thiopentone and tubarine	M.	1	—	—	—	—	—	1	—	—
Cyclopropane and tubarine	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	1	—	—	—
Cyclopropane and tubocurarine	F.	1	—	—	—	—	1	—	—	—
Decicaine	M.	3	—	—	—	—	—	—	2	1
Duracaine	M.	2	—	—	—	—	1	—	—	1
Ephedrine and nupercaine	M.	1	—	—	—	—	—	—	—	1
Ether	M.	49	26	4	2	—	—	4	4	9
	F.	33	12	3	4	1	2	4	5	2
Ether and curare	M.	1	—	—	—	—	—	—	1	—
Ether, curare, cyclopropane and pentothal	M.	1	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	1	1
Ether, curare, cyclopropane and pethidine	F.	1	—	—	—	1	—	—	—	—
Ether, curare, cyclopropane, scopolamine and thiopentone	M.	1	—	—	—	—	—	—	1	—
Ether, curare and pentothal	F.	1	—	—	—	—	—	—	1	—
Ether and curarine	F.	1	—	—	—	—	—	—	1	—
Ether, curarine, cyclopropane and tubarine	F.	1	—	—	—	—	—	—	1	—
Ether and cyclopropane	M.	1	—	—	—	—	—	1	—	—
	F.	4	—	—	—	—	1	1	—	2
Ether, cyclopropane, flaxedil and intraval	M.	1	—	—	—	—	—	—	1	—
Ether, cyclopropane, flaxedil, pentothal and scopolamine	F.	1	—	—	—	—	1	—	—	—
Ether, cyclopropane, flaxedil and thiopentone	F.	1	—	—	—	—	—	—	1	—
Ether, cyclopropane, omnopon, scopolamine and thiopentone	F.	1	—	—	—	—	—	1	—	—
Ether, cyclopropane and pentothal	M.	9	—	—	—	—	1	—	3	5
	F.	8	—	—	—	—	—	2	4	2
Ether, cyclopropane, pentothal and tubarine	M.	1	—	—	1	—	—	—	—	—
Ether, cyclopropane and sodium pentothal	F.	1	—	—	—	—	1	—	—	—
Ether, cyclopropane and thiopentone	M.	3	—	—	—	—	—	1	1	1
	F.	2	—	—	—	1	—	—	—	1
Ether, cyclopropane, thiopentone and tubarine	M.	1	—	—	—	—	—	—	1	—
Ether, cyclopropane, thiopentone and tubocurine	M.	1	—	—	—	1	—	—	—	—
Ether and evipan	F.	1	—	—	—	—	—	—	—	1
Ether and ethyl chloride	M.	40	26	11	—	—	1	1	—	1
	F.	28	17	6	—	—	1	1	2	1
Ether, ethyl chloride, curare and thiopentone	M.	1	—	—	—	—	—	1	—	—
Ether, ethyl chloride and nitrous oxide	M.	14	5	2	—	2	1	1	1	2
	F.	11	7	3	—	1	—	—	—	—
Ether, ethyl chloride, nitrous oxide and pentothal	M.	1	—	—	—	—	—	—	—	1
Ether, ethyl chloride, nitrous oxide and thiopentone	M.	1	—	—	—	—	—	—	—	1
Ether, ethyl chloride, nitrous oxide and trilene	M.	1	1	—	—	—	—	—	—	—
	F.	2	2	—	—	—	—	—	—	—
Ether, ethyl chloride and thiopentone	M.	1	—	1	—	—	—	—	—	—
Ether, ethyl chloride and trilene	M.	2	2	—	—	—	—	—	—	—
Ether and flaxedil	F.	1	—	—	—	—	—	—	—	1
Ether, flaxedil and intraval	F.	1	—	—	—	—	—	1	—	—
Ether, flaxedil and pentothal	M.	2	—	—	—	—	—	—	1	1
	F.	2	—	—	—	—	—	—	—	2
Ether, flaxedil and thiopentone	M.	1	—	—	—	—	—	—	1	—
Ether, kemithal and tubarine	F.	1	—	—	—	—	1	—	—	—
Ether and nembutal	M.	1	—	—	—	—	—	—	—	1
	F.	1	—	1	—	—	—	—	—	—
Ether and nitrous oxide	M.	57	8	5	2	2	5	12	6	17
	F.	62	11	4	4	4	9	7	8	15
Ether, nitrous oxide, amethocaine and novutox	M.	1	—	—	—	—	1	—	—	—

Table XCVIII.—*continued.*

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Ether, nitrous oxide and avertin ..	F.	1	—	—	1	—	—	—	—	—
Ether, nitrous oxide, curaldy and pentosan	M.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide, and curare	M.	4	—	1	—	—	2	1	—	—
	F.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide, curare, cyclopropane and pentothal	M.	2	—	—	—	—	—	—	—	2
Ether, nitrous oxide, curare and pentothal	M.	13	—	1	—	1	3	1	3	4
	F.	7	—	—	—	—	1	2	—	4
Ether, nitrous oxide, curare, pentothal and trilene	M.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide, curare, pentothal and tubercaine	M.	2	—	—	—	—	1	—	1	—
Ether, nitrous oxide and cyclopropane	M.	3	2	—	—	—	—	—	1	—
	F.	4	1	—	—	1	—	—	1	1
Ether, nitrous oxide, cyclopropane and pentothal	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	1	—	—
Ether, nitrous oxide and flaxedil ..	M.	4	—	—	—	—	—	—	1	3
	F.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide, flaxedil and pentothal	M.	4	—	—	—	—	—	1	1	2
	F.	4	1	—	—	—	—	—	—	3
Ether, nitrous oxide, flaxedil, pentothal and trilene	F.	1	—	—	—	—	—	1	—	—
Ether, nitrous oxide, flaxedil and thiopentone	M.	1	—	—	—	—	1	—	—	—
	F.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide and kemithal ..	F.	1	—	—	—	—	—	—	—	1
Ether, nitrous oxide, omnopon, pentothal, scopolamine and trilene ..	M.	1	—	—	—	1	—	—	—	—
	F.	1	—	—	—	—	—	—	1	—
Ether, nitrous oxide, omnopon, scopolamine and trilene	F.	1	—	—	—	—	—	—	—	1
Ether, nitrous oxide and pentothal ..	M.	37	—	4	3	4	1	8	8	9
	F.	21	—	—	1	2	3	4	4	7
Ether, nitrous oxide, pentothal and trilene	F.	1	—	—	—	—	1	—	—	—
Ether, nitrous oxide, pentothal and tubarine	M.	2	—	—	—	—	1	—	1	—
	F.	2	1	—	—	—	—	1	—	—
Ether, nitrous oxide, pentothal and tubocurarine	F.	1	—	—	—	—	1	—	—	—
Ether, nitrous oxide and procaine ..	M.	1	—	1	—	—	—	—	—	—
Ether, nitrous oxide, procaine, thiopentone, and trilene	F.	1	—	—	—	—	—	1	—	—
Ether, nitrous oxide and thiopentone	F.	3	—	—	—	—	—	—	1	2
Ether, nitrous oxide, thiopentone and tubarine	F.	1	—	—	—	—	—	—	—	1
Ether, nitrous oxide and trichlorethylene	M.	1	—	—	—	—	—	—	—	1
Ether, nitrous oxide and trilene ..	M.	6	1	—	—	2	—	1	—	2
	F.	5	—	1	—	—	3	—	1	—
Ether, nitrous oxide and tubarine ..	F.	1	—	—	—	1	—	—	—	—
Ether, omnopon and scopolamine ..	F.	1	—	—	—	—	1	—	—	—
Ether and pentothal	M.	5	—	—	—	—	—	2	2	1
	F.	1	—	—	—	—	—	1	—	—
Ether, pentothal, trilene and tubarine	M.	1	—	—	—	—	—	1	—	—
Ether, pentothal and tubarine ..	F.	2	—	—	—	—	1	1	—	—
Ether, pentothal and tubocurarine ..	F.	1	—	—	—	—	—	—	—	1
Ether and procaine	F.	1	1	—	—	—	—	—	—	—
Ether, and thiopentone	M.	1	—	—	—	—	—	—	1	—
Ether, thiopentone and trilene ..	M.	1	1	—	—	—	—	—	—	—
Ether, thiopentone and tubarine ..	M.	1	—	1	—	—	—	—	—	—
Ether and trilene	M.	1	—	—	—	—	—	—	—	1
	F.	1	—	—	—	1	—	—	—	—
Ether and tubarine	F.	1	—	—	—	—	—	—	1	—
Ether and vinesthene	M.	2	2	—	—	—	—	—	—	—
Ethyl chloride	M.	9	7	1	—	—	—	—	1	—
	F.	7	4	—	—	2	—	—	1	—
Ethyl chloride and nitrous oxide ..	M.	8	—	1	1	—	2	—	—	4
	F.	6	1	—	—	1	1	1	1	1
Ethyl chloride, nitrous oxide and curare	F.	1	—	—	—	—	—	—	1	—
Ethyl chloride, nitrous oxide, curare and pentothal	M.	1	—	—	—	—	—	—	—	1
Ethyl chloride, nitrous oxide, curare and thiopentone	M.	1	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	1	—	1	—
Ethyl chloride, nitrous oxide and evipan	F.	1	—	—	—	—	—	—	1	—
Ethyl chloride, nitrous oxide, flaxedil and pentothal	M.	1	—	—	—	—	—	1	—	—
	F.	2	—	—	—	—	—	—	2	—
Ethyl chloride, nitrous oxide, omnopon scopolamine and thiopentone ..	M.	1	—	—	—	—	—	—	1	—
Ethyl chloride, nitrous oxide and pentothal	M.	5	—	—	—	—	2	1	1	1
	F.	9	—	—	1	—	3	—	2	3
Ethyl chloride, nitrous oxide, pentothal and tubocurarine	F.	1	—	—	—	—	—	1	—	—

Table XCVIII.—*continued.*

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Ethyl chloride, nitrous oxide and thiopentone	M.	1	—	—	—	—	—	—	—	1
	F.	3	—	—	—	—	1	1	—	1
Ethyl chloride, nitrous oxide, thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	1
Ethyl chloride, nitrous oxide and trilene	F.	1	1	—	—	—	—	—	—	—
Ethyl chloride, nitrous oxide and tubarine	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	1	—	—
Ethyl chloride, nupercaine and pentothal	F.	1	—	—	—	—	—	—	1	—
Evipan	M.	1	—	—	—	—	—	—	—	1
	F.	1	—	—	—	—	—	—	—	1
Flaxedil	M.	1	—	—	—	—	—	—	—	1
Flaxedil and cyclonal	F.	1	—	—	—	—	—	1	—	—
Flaxedil and kemithal	F.	1	—	—	—	—	—	—	—	1
Flaxedil and nupercaine	M.	1	—	—	—	—	—	—	—	1
Flaxedil, omnopon and scopolamine	F.	1	—	—	—	—	1	—	—	—
Flaxedil, omnopon, scopolamine pethidine and thiopentone	F.	1	—	—	—	—	1	—	—	—
Flaxedil and pentothal	M.	13	—	1	—	—	—	2	4	6
	F.	17	—	—	—	—	2	3	6	6
Flaxedil, pentothal and pethidine	M.	1	—	—	—	—	—	—	1	—
Flaxedil, pentothal, pethidine and trilene	F.	1	—	—	—	—	—	—	1	—
Flaxedil, pentothal sodium and pethidine	F.	1	—	—	—	1	—	—	—	—
Flaxedil, pentothal and trilene	M.	2	—	—	—	—	—	1	1	—
	F.	1	—	—	—	—	—	—	1	—
Flaxedil, pentothal and xylocaine	M.	1	—	—	—	1	—	—	—	—
Flaxedil, pethidine and thiopentone	M.	2	—	—	—	—	—	1	—	1
Flaxedil, pethidine and thiopentone sodium	F.	1	—	—	—	—	—	—	—	1
Flaxedil and sodium amytal	F.	1	—	—	—	—	1	—	—	—
Flaxedil and thiopentone	M.	7	1	1	—	—	2	1	2	—
	F.	5	—	—	—	—	—	2	2	1
Kemithal	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	1	—
Kemithal and tubocurarine	F.	1	—	—	—	—	1	—	—	—
Nembutal	F.	1	—	—	—	—	—	—	—	1
Nembutal, novutox and omnopon	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide	M.	24	—	—	1	2	2	4	3	12
	F.	25	—	4	3	2	1	1	4	10
Nitrous oxide, anethaine, pentothal procaine and tubarine	M.	1	—	—	—	1	—	—	—	—
Nitrous oxide and avertin	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide, cocaine, omnopon, pentothal, scopolamine and trilene	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide, cocaine, procaine and thiopentone	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide and curare	M.	3	—	—	—	—	2	—	1	—
Nitrous oxide, curare and cyclopropane	M.	3	—	—	—	—	1	—	2	—
	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide, curare, cyclopropane and pentothal	M.	1	—	—	—	—	—	1	—	—
	F.	3	—	1	—	1	—	—	—	1
Nitrous oxide, curare, cyclopropane, pentothal and xylocaine	M.	1	—	—	—	—	1	—	—	—
Nitrous oxide, curare, cyclopropane and thiopentone	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide, curare, flaxedil and and intraval	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, curare, intraval and trilene	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, curare and kemithal	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, curare derivative, omnopon, pentothal, pethidine and scopolamine	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide, curare, omnopon, pentothal and scopolamine	M.	1	—	—	—	1	—	—	—	—
	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide, curare and pentothal	M.	25	—	—	—	1	3	4	6	11
	F.	19	—	1	—	1	3	4	3	7
Nitrous oxide, curare, pentothal and pethidine	M.	2	—	—	—	—	—	1	—	1
Nitrous oxide, curare, pentothal and trilene	M.	1	—	—	1	—	—	—	—	—
	F.	4	—	—	—	—	1	1	1	1
Nitrous oxide, curare, pethidine and thiopentone	M.	2	—	—	—	—	—	1	—	1
Nitrous oxide, curare and sodium thiopentone	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide, curare and thiopentone	M.	5	—	—	—	—	—	1	3	1
	F.	4	—	—	—	—	1	1	—	2
Nitrous oxide, curare, thiopentone and trilene	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide, curare and trilene	M.	2	—	—	—	—	—	1	1	—
Nitrous oxide, curarine, cyclopropane and pentothal	M.	1	—	—	—	—	—	—	—	1

Table XCVIII.—*continued.*

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Nitrous oxide and cyclopropane ..	M.	4	1	—	—	—	—	—	1	2
	F.	8	—	1	—	—	—	—	2	5
Nitrous oxide, cyclopropane and flaxedil	M.	1	—	—	—	—	—	1	—	—
Nitrous oxide, cyclopropane, flaxedil and pentothal	M.	5	—	—	—	—	1	1	1	2
	F.	5	—	—	—	—	1	—	1	3
Nitrous oxide, cyclopropane, omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, cyclopropane and pentothal	M.	11	—	—	1	1	—	1	3	5
	F.	7	—	—	—	—	1	1	1	4
Nitrous oxide, cyclopropane, pentothal and tubarine	M.	2	—	—	—	—	—	—	1	1
Nitrous oxide, cyclopropane and thiopentone	M.	2	—	—	—	—	—	—	2	—
	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, decamethonium, flaxedil and hexamethonium bromide ..	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide and evipan sodium ..	M.	1	—	—	—	1	—	—	—	—
Nitrous oxide, evipan, omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, evipan and trilene ..	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide and flaxedil	M.	1	—	—	—	—	—	—	1	—
	F.	2	—	—	—	—	—	—	1	1
Nitrous oxide, flaxedil, intraval pentothal and pethidine	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, intraval and trilene	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil and kemithal ..	M.	1	—	1	—	—	—	—	—	—
Nitrous oxide, flaxedil, kemithal and pethidine	F.	1	—	—	—	1	—	—	—	—
Nitrous oxide, flaxedil, omnopon and pentothal	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil, omnopon, pentothal and scopolamine ..	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide, flaxedil, omnopon, pentothal, scopolamine and trilene	M.	1	—	—	—	—	—	1	—	—
Nitrous oxide, flaxedil and pentothal	M.	15	—	1	1	—	1	1	7	4
	F.	20	—	—	—	1	2	3	5	9
Nitrous oxide, flaxedil, pentothal and pethidine	M.	5	—	—	—	1	—	1	—	3
	F.	6	—	—	—	—	—	4	1	1
Nitrous oxide, flaxedil, pentothal and trilene	M.	10	—	—	—	1	1	2	2	4
	F.	5	—	—	—	—	—	2	1	2
Nitrous oxide, flaxedil and pethidine	M.	2	—	—	—	—	—	—	—	2
Nitrous oxide, flaxedil, pethidine and thiopentone	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, flaxedil and thiopentone	M.	7	—	—	—	—	—	1	4	2
	F.	4	—	—	—	—	—	1	—	3
Nitrous oxide, flaxedil and tubarine ..	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide, intraval, pethidine and tubocurarine	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide and kemithal	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide and nembutal	M.	1	1	—	—	—	—	—	—	—
	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide, novocaine and pentothal	F.	1	—	—	1	—	—	—	—	—
Nitrous oxide, novocaine and thiopentone	M.	1	—	—	—	—	—	1	—	—
Nitrous oxide, novutox and pentothal	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide and nupercaine ..	M.	2	—	—	—	—	—	—	2	—
Nitrous oxide, nupercaine, omnopon, pentothal and scopolamine ..	M.	1	—	—	—	—	—	1	—	—
Nitrous oxide, nupercaine and pentothal	M.	1	—	—	—	—	—	1	—	—
	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide, nupercaine and thiopentone	M.	2	—	—	—	—	—	—	1	1
	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide, omnopon, phenocaine and scopolamine	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, omnopon and scopolamine	M.	1	—	—	—	—	—	1	—	—
	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide and pentothal	M.	42	—	2	2	2	4	4	14	14
	F.	38	—	1	—	4	6	5	6	16
Nitrous oxide and pentothal sodium	F.	1	—	—	—	—	—	—	1	—
Nitrous oxide, pentothal and pethidine	M.	1	—	—	—	—	—	—	1	—
Nitrous oxide, pentothal, pethidine and trilene	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, pentothal, pethidine and tubarine	F.	1	—	—	—	—	—	1	—	—
Nitrous oxide, pentothal and procaine	M.	1	—	—	—	—	—	1	—	—
Nitrous oxide, pentothal, procaine and tubarine	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide, pentothal, scopolamine and xylocaine	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide, pentothal sodium, thiopentone and trilene	F.	1	—	—	—	—	—	—	1	—

Table XCVIII.—*continued.*

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age							
			0–	5–	15–	25–	35–	45–	55–	65 and over
Nitrous oxide, pentothal and trilene ..	M.	10	—	—	1	—	—	2	2	5
	F.	10	—	1	1	1	2	1	1	3
Nitrous oxide, pentothal and tubarine	M.	5	—	—	—	—	—	1	2	2
	F.	2	—	—	—	1	—	—	1	—
Nitrous oxide, pentothal and xylocaine	M.	1	—	—	—	—	—	—	—	1
	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide and pethidine	M.	2	—	—	—	—	—	—	1	1
Nitrous oxide, procaine and thiopentone	M.	1	—	—	—	—	—	—	—	1
Nitrous oxide, sodium thiopentone and trilene	F.	1	—	—	—	—	—	—	—	1
Nitrous oxide and thiopentone ..	M.	11	—	—	—	2	—	1	3	5
	F.	4	—	1	—	—	1	—	—	2
Nitrous oxide, thiopentone and trilene	M.	3	—	1	1	—	—	—	—	1
	F.	2	—	1	—	—	—	—	—	1
Nitrous oxide, thiopentone and tubarine	M.	4	—	—	—	—	1	—	2	1
	F.	5	—	1	1	—	—	2	1	—
Nitrous oxide, thiopentone and tubocurarine	M.	1	—	—	—	—	1	—	—	—
	F.	1	—	—	—	—	1	—	—	—
Nitrous oxide and trilene	M.	13	—	1	1	—	2	3	1	5
	F.	12	2	—	—	2	2	2	2	2
Nitrous oxide and tubarine	M.	1	—	—	—	—	—	—	—	1
	F.	1	—	—	—	1	—	—	—	—
Nitrous oxide and xylocaine	F.	1	—	—	—	—	—	—	—	1
Novocaine	M.	4	1	—	—	—	—	—	—	3
	F.	5	1	—	—	—	1	—	1	2
Novutox	M.	1	—	—	—	—	1	—	—	—
Nupercaine	M.	10	—	—	—	—	—	1	2	7
	F.	10	—	—	1	1	2	2	—	4
Nupercaine, omnopon, scopolamine and thiopentone	M.	1	—	—	—	—	—	—	—	1
Nupercaine and pentothal	M.	6	—	—	1	—	1	1	—	3
	F.	4	—	—	—	—	1	2	1	—
Nupercaine and thiopentone ..	M.	1	—	—	—	—	—	1	—	—
Omnopon and pentothal	F.	2	—	—	—	—	—	—	—	2
Omnopon, procaine and scopolamine	F.	1	—	—	—	—	—	1	—	—
Omnopon and scopolamine	F.	1	—	—	—	—	—	1	—	—
Omnopon, scopolamine and stovaine	M.	1	—	—	—	—	1	—	—	—
Omnopon, scopolamine and thiopentone	F.	1	—	—	—	1	—	—	—	—
Omnopon, scopolamine, thiopentone and tubocurarine	M.	1	—	—	—	1	—	—	—	—
Pentothal	M.	94	1	1	3	4	3	9	26	47
	F.	81	—	2	7	7	8	6	18	33
Pentothal sodium	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	1	—	—
Pentothal and flaxedil	M.	5	—	1	—	—	1	1	—	2
	F.	1	—	—	—	1	—	—	—	—
Pentothal and pethidine	M.	1	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	—	1
Pentothal and procaine	M.	1	—	—	—	—	—	—	—	1
Pentothal and scopolamine	F.	1	—	—	—	—	—	—	—	1
Pentothal and thiopentone	F.	1	—	—	—	—	—	—	—	1
Pentothal and trilene	M.	3	—	—	—	—	—	—	—	3
	F.	1	—	—	—	—	1	—	—	—
Pentothal and tubarine	M.	4	—	—	—	—	1	—	1	2
	F.	3	—	—	—	—	—	3	—	—
Pentothal and tubocurarine	M.	3	—	—	—	1	—	—	1	1
Pentothal and xylocaine	M.	1	—	—	—	—	—	—	—	1
Percaine	M.	1	—	—	—	—	—	—	—	1
Pethidine	M.	1	—	—	—	—	—	—	—	1
Pethidine, thiopentone and tubocurarine	M.	1	—	—	—	—	—	—	1	—
Planocaine	M.	1	—	—	—	—	—	—	—	1
Procaine	M.	11	2	—	—	2	—	1	1	5
	F.	5	—	—	—	1	1	1	—	2
Thiopentone	M.	17	—	1	—	—	—	4	7	5
	F.	14	—	—	—	1	—	5	1	7
Thiopentone and pethidine	M.	1	—	—	1	—	—	—	—	—
Thiopentone and tubarine	M.	8	—	1	—	1	1	—	3	2
	F.	1	—	—	—	—	1	—	—	—
Thiopentone and tubocurarine ..	M.	2	—	—	—	—	1	—	—	1
Trilene	M.	1	—	—	—	1	—	—	—	—
	F.	1	—	—	—	—	1	—	—	—
Tubocurarine	F.	1	1	—	—	—	—	—	—	—
V.A.M.	M.	2	—	1	—	—	—	1	—	—
Xylocaine	M.	3	—	—	—	1	—	—	—	2
	F.	3	—	—	—	1	1	—	1	—
Anæsthetic (not stated)	M.	43	3	2	3	1	4	6	11	13
	F.	32	1	—	2	3	4	4	5	13
Total	M.	**1017**	**95**	**49**	**31**	**49**	**78**	**129**	**235**	**351**
	F.	**857**	**69**	**35**	**36**	**61**	**113**	**123**	**152**	**268**

Medical Certification of Cause of Death—proportion of bodies seen after death

The usual summary of the percentage of deaths where the body was seen after death by the certifying practitioner or which were investigated by a coroner is given below. The figures for 1951 and 1952 are based on an examination of a sample of one medical certificate in seven.

	1928	1933	1947	1951*	1952*
Seen after death	*51·0*	*53·7*	*60·9*	*67·9*	*71·3*
Inquest or Coroners P.M. without inquest or other cases reviewed by coroners	*11·2*	*11·2*	*14·0*	*17·3*	*18·7*
Cases certified by Medical Practitioners	*39·8*	*42·5*	*46·9*	*50·6*	*52·6*
Not seen after death	*48·5*	*46·1*	*38·8*	*31·8*	*28·6*
No statement	*0·5*	*0·2*	*0·3*	*0·3*	*0·1*
Total	*100·0*	*100·0*	*100·0*	*100·0*	*100·0*
Total deaths in year ...	460,389	496,465	517,615	549,380	497,484

* Estimated from a sample of medical certificates.

Both the proportion seen by certifying practitioners and the proportion investigated by coroners continued to increase. The statement by a certifying practitioner is made when he signs the medical certificate of cause of death and since there are likely to be occasions when he subsequently sees the body the proportion seen after death may be understated.

ADVISORY COMMITTEE ON MEDICAL NOMENCLATURE AND STATISTICS

Report (dated 27th February, 1953) on the Work of the Committee, November, 1950, to November, 1952

Introductory

The first report on the Committee's work covered the period of two years from the Committee's formation in November, 1948, to November, 1950. The present report carries the account forward a further two years to November, 1952.

It has been found that a number of matters submitted to the Committee require more detailed discussion than can conveniently be given in full Committee and that there is advantage in bringing in people from outside the Committee who may have a special contribution to make in considering them. To meet this need, the Committee has accordingly, since June, 1951, found it expedient to appoint several Sub-Committees to report on specific matters referred to them. References to the work of these Sub-Committees are made in the appropriate sections of the report and a list of their members is given at the end.

In addition, the membership of the main Committee was strengthened in November, 1951, particularly with a view to increasing the representation of both the providers of raw material for medical statistics and the users of the finished product. A list of present members is appended to the report.

In relation to the preparation of certain sections of the Code of Operational Procedures and of the draft Code of Anæsthetic Procedures (see below), advice has been obtained from a number of specialists who are not members of the Committee. Several of those listed in the previous report continued to give advice, and the Committee is grateful to them, as well as to those listed at the end of the present report, and to the staffs of hospitals which have helped by trying out the classifications concerned.

Form of Report

The pattern of the first report was determined by the type of work which fell to the Committee and can conveniently be continued in the present report under the three heads:—

(*a*) The International Classification,
(*b*) Problems arising in this country,
(*c*) International Problems other than (*a*).

Many of the subjects considered by the Committee have both international and domestic aspects and their allocation under one head rather than another is to some extent arbitrary. For example, there is a domestic need for clarification of definitions used in morbidity statistics but, because the subject was specifically referred by World Health Organization for study in this country, it is dealt with as an international problem. On the other hand, since the question of instruction in medical certification was first considered by the Committee before any specific request on the subject was made by the World Health Organization, it is dealt with as a domestic matter.

The International Classification

Code of Operational Procedures. Since the last report, the draft tabular list has been in use on an experimental basis in a number of hospitals; this list has been supplemented by an alphabetical index and by a short section on radiotherapy procedures. The draft list is now being revised in the light of comments received from experts to whom it has been referred and of the experience of those hospitals which have been trying it out. It is hoped that the revised list will be adopted for general use in this country and it is proposed to submit it to the World Health Organization as a suggested basis for drawing up a classification for international use.

Code of Anæsthetic Procedures. The preparation of an acceptable code of anæsthetic procedures has met with considerable difficulties, largely in reconciling the amount of detail which anæsthetists tend to regard as essential for such a code to be useful with what appears to be practicable for a statistical classification. Nevertheless, thanks to the willing co-operation of a few anæsthetists, the Committee were able to accept, in November, 1952, a draft code as suitable for strictly limited trials, although they felt that the proposed code was probably still too detailed as a basis for statistics.

Adaptation of the International Classification for use as a Diagnostic Index. This question was referred to the Committee in March, 1951, partly as a result of a recommendation of the Expert Committee on Health Statistics set up by the World Health Organization (Report on the Second Session) and partly because there was an apparent need in this country for some guidance on the subject. The Sub-Committee, which was appointed to consider this and other matters relating to hospital statistics, obtained the views of a number of hospitals and has come to the conclusion that the International Classification is generally suitable for a diagnostic index and that its construction permits subdivision of its codes into varying degrees of detail. There are opposing views about the detail required in adaptation and the task of reconciling these views would be considerable. The Sub-Committee is, however, attempting to prepare a memorandum setting out the general principles which should be followed in adapting the classification for use as a diagnostic index.

Adaptation of the Classification to the needs of the Armed Services. In June, 1951, the Committee considered a paper received from the World Health Organization setting out proposals, prepared jointly by the Medical Advisory Committee of the Dominion Statistician of Canada and the United States Committee on Vital and Health Statistics, for adapting the International Classification to the needs of the Armed Services. The Committee appointed a Sub-Committee to consider the proposals in detail and accepted that Sub-Committee's Report in November, 1952. The Report, which considered the proposed abbreviated list unsatisfactory and the proposed detailed list impracticable in this country, included an alternative list following a framework similar to that used in the detailed list. This list, which is now being used by the armed services in this country, has been forwarded to the World Health Organization.

Problems arising in this Country

Registration of causes of stillbirth. The last Report recorded that the Committee was in favour of causes of stillbirth being registered in England and Wales. The matter was further discussed by the Committee in February, 1952, when it was decided that the Committee should not press for further action at present, because of differences of opinion about the possibility of obtaining sufficiently reliable information, particularly in view of the high proportion of stillbirths certified by mid-wives in England and Wales.

Hospital in-patient enquiry. The Committee has from time to time advised on points relating to this enquiry, the object of which is to obtain information about the "hospitalised" incidence of diseases and other information, relating to individual diseases, useful in the administration of the hospital service, e.g., delay in admission or duration of stay. In particular, the Committee considered, in November, 1951, the plans which were being made by the General Register Office and the Ministry of Health for extending the enquiry on a sampling basis with a revised form, designed to link up with the administrative statistics collected by the Ministry of Health; they took note of the progress made on these lines in November, 1952.

Cancer Registration Scheme. Figures relating to the position at the third year follow-up of cases registered in 1946 were put before the Committee in February, 1952. These figures indicated a number of deficiencies and difficulties in the registration scheme and it was decided to appoint a Sub-Committee to investigate and report on these. The Sub-Committee have suggested that a further serious attempt to achieve complete registration of hospital cases should be made and that, to assist in this, the abstract card should be simplified; they have considered the broad lines on which this might be done. A simplified scheme could not in itself provide information suitable for comparing the efficacy of different methods of treatment; if such a scheme is introduced, the problem of supplementing it by the collection of detailed information for this purpose will, therefore, have to be considered.

Mental Health Statistics. Preliminary figures for the first year of the enquiry, 1949, were considered by the Committee in February, 1952, and a number of suggestions were made with a view to increasing the usefulness of the statistics, particularly by distinguishing first from subsequent admissions. Some of these would require fairly radical reorganisation of the scheme and are being examined with that in mind.

Statistics derived from General Practitioners' Records. The Committee have commented on preliminary figures, from some of the ten practices taking part in this pilot enquiry, which were referred to the Committee in relation to the form of presentation to be adopted.

Medical Certification and Reporting of Diagnosis. In November, 1951, the General Medical Council considered the proposals for instruction in certification of causes of death which were submitted to them on the Committee's recommendation; the Council decided that there was little further that they could do about instruction in medical schools, and that it was for the Registrar General, rather than them, to issue guidance to newly qualified doctors. The Committee advised that, in the light of this decision, an approach should be made to deans of medical schools indicating broadly what appeared to be needed by way of instruction, covering reporting of diagnoses for other statistical purposes as well as certification of causes of death, and also suggesting that arrangements should be made for practical guidance in certification during the pre-registration year; this was done in September, 1952. Early in 1952, the World Health Organization's booklet on medical certification of cause of death was published and the Committee suggested that the issue of this booklet to all newly qualified doctors would be very useful; arrangements are being made for this to be done.

Statistical publications of the General Register Office. Proposals for a revision of the annual medical tables contained in Part I of the Registrar General's Statistical Review were considered by the Committee in March, 1951, and some suggestions relating to these tables were made. In June, 1952, the Committee

approved of a proposal to cease regular preparation of decennial " aggregate " volumes and welcomed a proposal to prepare interim tables relating to mortality in 1950 by social classes and certain broad occupational groups.

International Problems other than those concerned with Classification

Relating to Infant and Fœtal Deaths. It has not been possible to make any further progress on the questions, referred to in the last Report, relating to a satisfactory definition of immaturity and the classification of fœtal deaths when more than one cause is stated.

Rates and Definitions for use in Morbidity Statistics. At their third session, the Expert Committee on Health Statistics set up by the World Health Organization, recommended that preliminary reports on the subject of rates and definitions in morbidity statistics should be prepared by a number of countries, including the United Kingdom. This question was referred to the main Committee in February, 1952, and a Statistics Sub-Committee was appointed with the study of this subject allotted to it as its first task. The Sub-Committee is considering different fields of morbidity statistics in turn.

Other problems arising from the work of the Expert Committee on Health Statistics have been recommended for study. These were referred to the Committee, who were informed of preparatory work which was being done on a number of them, but they have not yet reached a stage when specific reference to them in this Report would be appropriate.

Future Work

The World Health Organization Expert Committee anticipated that the work of obtaining suggestions for revision of the International Classification should start early in 1953 with a view to holding the full revision conference in 1955. Revision problems will probably be referred to the Committee in the near future.

An International Conference of National Committees on Vital and Health Statistics and equivalent organizations is to be held in London in October, 1953, probably at Somerset House. The agenda for the Conference is likely to call for some preparatory work by the Committee and to give rise to further subjects which are deemed to require international consideration.

The morbidity enquiries at present being conducted are still subject to change both in their organization and in the form of presentation of the statistics collected. A Sub-Committee has already been set up to review the cancer registration scheme and, while other enquiries are unlikely to require the appointment of special Sub-Committees, the number of questions referred to the main Committee are not likely to diminish in the near future.

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GREAT BRITAIN AND IRELAND

Vital Statistics

Table A1 shows the census populations, by sex, of the several countries of Great Britain and Ireland for each census since 1821, and mid-year estimates for each of the last 35 years. Population estimates, marriages, births, deaths and infant deaths for the current year are shown in Table W and repeated, with comparative figures for earlier years, in Table XCIX.

Table XCIX.—Great Britain and Ireland. Vital Statistics. 1938 and 1946 to 1952

	Great Britain and Ireland	England and Wales	Scotland	Northern Ireland	Irish Republic	Wales
Estimated Mid-Year Home Population (in thousands)						
1952 Males	25,722	21,110	2,442	670	1,500	1,270
1952 Females	27,670	22,845	2,672	705	1,448	1,320
1952 Persons	53,392	43,955	5,114	1,375	2,948	2,590
Marriages						
1952	415,540	349,308	41,163	9,300	15,769	20,590
Persons married per 1,000 living						
1938	16·8	17·6	15·5	13·4	10·1	16·2
1946	17·6	18·0	17·7	14·5	11·8	—
1947	18·0	18·6	17·2	14·1	11·0	—
1948	17·6	18·2	16·8	13·7	10·8	—
1949	16·6	17·1	16·0	13·4	10·9	—
1950	15·8	16·3	15·5	13·2	10·9	—
1951	16·0	16·5	16·2	13·7	10·7	16·0
1952	15·6	15·9	16·1	13·5	10·7	15·9
Live Births*						
1952	857,143	673,735	90,422	28,760	64,226	41,388
Per 1,000 living						
1938	15·7	15·1	17·7	20·0	19·4	15·3
1946	19·6	19·2	20·2	22·3	22·9	—
1947	20·8	20·5	21·9	23·2	23·2	—
1948	18·3	17·8	19·3	21·7	22·0	—
1949	17·2	16·7	18·4	21·2	21·5	—
1950	16·5	15·8	17·7	20·9	21·3	—
1951	16·1	15·5	17·7	20·7	21·2	16·0
1952	16·1	15·3	17·7	20·9	21·8	16·0

* England and Wales: occurrences; remainder: registrations.

Table XCIX.—*continued.*

	Great Britain and Ireland	England and Wales	Scotland	Northern Ireland	Irish Republic	Wales
Deaths†						
1952	608,961	497.484	61,510	14,812	35,155	31,005
Per 1,000 living						
1931–1938‡ ...	12·4	12·0	13·3	14·4	14·2	12·9
1946	12·3	12·0	13·1	12·5	14·0	—
1947	12·3	12·0	12·9	12·6	14·8	—
1948	11·0	10·8	11·8	11·2	12·1	—
1949	11·8	11·7	12·3	11·4	12·7	—
1950	11·7	11·6	12·4	11·6	12·7	—
1951	12·7	12·5	12·9	12·8	14·3	13·9
1952	11·4	11·3	12·0	10·8	11·9	12·0
Deaths of Infants under 1 year§						
1952	25,499	18,555	3,181	1,117	2,646	1,377
Per 1,000 live births						
1938	55	53	70	75	67	57
1946	44	43	54	54	65	47
1947	45	41	56	53	68	49
1948	37	34	45	46	50	39
1949	35	32	41	45	51	39
1950	32	30	39	40	45	35
1951	32	30	37	41	45	36
1952	30	28	35	39	41	33

† Deaths include those of non-civilians registered in the country. Death rates, except for the Irish Republic, are based on civilian deaths and populations for 1946. From 1947 to 1949 inclusive, the death rates for England and Wales and for Northern Ireland are based on total deaths and populations, and those for Scotland on total deaths and populations excluding armed forces overseas in 1939. The death rates from 1950 are based on total deaths and home populations.

‡ Crude death rates in 1938 were rather lower than in adjacent years.

§ England and Wales: deaths per 1,000 related live births; remainder: deaths per 1,000 live births registered in the year.

Population—The combined home population of Great Britain and Ireland at mid-1952 was estimated at 53,392,000, an increase of 5·3 per cent above that of 1939. The corresponding increase for England and Wales was about 6 per cent, for Scotland 2 per cent, for Northern Ireland 6 per cent and for the Irish Republic ½ per cent.

Marriage Rates— The crude marriage rate in 1952 declined slightly compared with 1951 in all the countries except the Irish Republic where it remained level. The rates were above the pre-war level in Scotland and Ireland, but in England and Wales the crude rate had fallen below that of 1938. The crude rates, however, are somewhat misleading, as they are based on the total population of which only the non-married component is at risk and this component has been reduced by high marriage rates for over a decade. The detailed analysis in the Marriage chapter of this volume shows that in fact in relation to the non-married population marriage incidence in England and Wales is still very much higher than before the war.

Birth Rates—Crude birth rates, which have been declining from their post-war peak in 1947, remained fairly steady in 1952 on the whole. There was a slight fall in England and Wales and a slight rise in Ireland, the combined rate for all countries remaining the same as in 1951, viz. 16·1 per thousand.

Death Rates—The number of deaths in Great Britain and Ireland in 1952 fell by about 66,000 compared with 1951, when the numbers were unduly high owing to an influenza epidemic early in the year. The crude death rate fell from 12·7 to 11·4 per thousand, and reductions were observed in each of the countries, especially in Ireland and in Wales.

Infant Mortality Rates—The death rates of infants under 1 year of age per 1,000 live births were lower in 1952 than in the previous year. The combined rate per 1,000 for the whole of Great Britain and Ireland was 30, and the individual rates ranged from 28 in England and Wales to 41 in the Irish Republic.

Causes of Death in the United Kingdom—Numbers of deaths and crude death rates in 1952 for a short list of causes are given in Table C for the United Kingdom as a whole and for the constituent countries.

In relation to rates for the United Kingdom as a whole, mortality from respiratory tuberculosis was high amongst men in Wales and amongst women in Scotland and Northern Ireland. The mortality from cancer of stomach was higher for each sex in Wales, whereas mortality from cancer of lung (each sex) and from cancer of breast (female) were notably lower in Northern Ireland. The latter area had the highest rate for acute rheumatic fever but the lowest for chronic rheumatic heart disease. Deaths ascribed to intracranial vascular disorders, coronary and myocardial disease, tended to be higher in Scotland, but fewer deaths were assigned to hypertension.

In Wales a lower mortality from pneumonia was recorded for females, whereas death rates from bronchitis were much higher in Wales and in England than in Scotland and Northern Ireland.

Large differences were recorded in the proportions of deaths assigned to senility, arising from differences in certification and classification between the countries.

Mortality from motor vehicle accidents showed no large variations, but the rates for fatal accidents of other kinds were notably higher in Scotland (each sex) and in Wales (males). The suicide rates for each sex were highest in England, lower in Wales and Scotland, and lowest in Northern Ireland.

Table C.—Deaths and Death Rates by Cause and Sex, 1952. United Kingdom and its divisions.

Cause of Death (and International classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
All Causes	M.	**296,827**	**289,161**	**240,775**	**16,985**	**31,401**	**7,666**	**12,250**	**12,273**	**12,130**	**13,374**	**12,859**	**11,442**
	F.	**276,979**	**269,833**	**225,704**	**14,020**	**30,109**	**7,146**	**10,572**	**10,585**	**10,496**	**10,637**	**11,267**	**10,136**
Tuberculosis of respiratory system (001-008)	M.	7,465	7,268	5,929	492	847	197	308	308	299	387	347	294
	F.	3,604	3,476	2,699	215	562	128	138	136	126	163	210	182
Tuberculosis, other forms (010-019)	M.	826	787	650	43	94	39	34	33	33	34	38	58
	F.	712	666	511	46	109	46	27	26	24	35	41	65
Syphilis and its sequelae (020-029)	M.	1,197	1,173	1,026	71	76	24	49	50	52	56	31	36
	F.	565	556	503	19	34	9	22	22	23	*14*	13	13
Typhoid fever (040)	M.	7	6	4	1	1	1	*0*	*0*	*0*	*1*	*0*	*1*
	F.	5	4	4	—	—	1	*0*	*0*	*0*	—	—	*1*
Cholera (043)	M.	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery, all forms (045-048)	M.	25	25	21	3	1	—	1	1	*1*	*2*	*0*	—
	F.	17	17	12	—	5	—	*1*	*1*	*1*	—	*2*	—
Scarlet fever and streptococcal sore throat (050-051)	M.	31	31	28	2	1	—	1	1	1	*2*	*0*	—
	F.	39	38	31	3	4	1	1	1	1	*2*	*1*	*1*
Diphtheria (055)	M.	19	19	13	1	5	—	*1*	*1*	*1*	*1*	*2*	—
	F.	21	21	16	2	3	—	1	1	*1*	*2*	*1*	—
Whooping cough (056)	M.	104	94	75	9	10	10	4	4	4	*7*	*4*	*15*
	F.	128	116	97	3	16	12	5	5	5	*2*	*6*	*17*
Meningococcal infections (057)	M.	188	180	150	10	20	8	8	8	8	*8*	8	*12*
	F.	156	155	123	7	25	1	6	6	6	*5*	9	*1*
Plague (058)	M.	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—
Acute poliomyelitis (080)	M.	179	175	160	7	8	4	7	7	8	*6*	*3*	*6*
	F.	115	112	105	3	4	3	4	4	5	*2*	*1*	*4*
Smallpox (084)	M.	—	—	—	—	—	—	—	—	—	—	—	—
	F.	1	1	1	—	—	—	*0*	*0*	*0*	—	—	—
Measles (085)	M.	87	82	68	3	11	5	4	3	3	*2*	*5*	*7*
	F.	84	81	67	3	11	3	3	3	3	*2*	*4*	*4*
Typhus and other rickettsial diseases (100-108)	M.	—	—	—	—	—	—	—	—	—	—	—	—
	F.	2	2	1	—	1	—	*0*	*0*	*0*	—	*0*	—

Table C.—*continued*

Cause of Death (and International classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Malaria (110-117)	M.	8	8	7	1	—	—	*0*	*0*	*0*	*1*	—	—
	F.	1	1	1	—	—	—	*0*	*0*	*0*	—	—	—
All other diseases classified as infective and parasitic (120-138)	M.	639	617	490	39	88	22	26	26	25	31	36	33
	F.	630	613	507	44	62	17	24	24	24	33	23	*24*
Malignant neoplasm of stomach (151)	M.	9,301	9,048	7,392	674	982	253	384	384	372	531	402	378
	F.	7,364	7,174	5,855	488	831	190	281	281	372	370	311	270
Malignant neoplasm of trachea, bronchus and lung (162-163) ..	M.	13,417	13,256	11,415	566	1,275	161	554	563	575	446	522	240
	F.	2,521	2,483	2,144	93	246	38	96	97	100	71	92	54
Malignant neoplasm of breast (170)	M.	70	67	55	4	8	3	3	3	3	*3*	*3*	*4*
	F.	9,271	9,108	7,842	443	823	163	354	357	365	336	308	231
Malignant neoplasm of uterus (171-174)	F.	4,612	4,499	3,785	239	475	113	176	176	176	181	178	160
Leukaemia and aleukaemia (204)	M.	1,241	1,210	1,043	59	108	31	51	51	53	46	44	46
	F.	1,070	1,045	900	41	104	25	41	41	42	31	39	35
Other malignant and lymphatic neoplasms (remainder of 140-205)	M.	27,631	27,020	22,781	1,440	2,799	611	1,140	1,147	1,148	1,134	1,146	912
	F.	23,364	22,851	19,240	1,143	2,468	513	892	896	895	867	924	728
Benign and unspecified neoplasms (210-239)	M.	876	852	732	59	61	24	36	36	37	46	25	36
	F.	1,042	1,009	869	56	84	33	40	40	40	42	31	47
Diabetes mellitus (260)	M.	1,262	1,233	1,023	68	142	29	52	52	52	54	58	43
	F.	2,628	2,582	2,097	150	335	46	100	101	98	114	125	65
Anaemias (290-293)	M.	724	695	559	44	92	29	30	29	28	35	38	43
	F.	1,363	1,325	1,047	101	177	38	52	52	49	77	66	54
Vascular lesions affecting central nervous system (330-334) ..	M.	33,830	33,017	27,214	1,944	3,859	813	1,396	1,401	1,371	1,531	1,580	1,213
	F.	46,573	45,458	37,708	2,522	5,228	1,115	1,778	1,783	1,754	1,914	1,956	1,582
Nonmeningococcal meningitis (340)	M.	251	241	183	14	44	10	10	10	9	*11*	18	*15*
	F.	183	173	136	9	28	10	7	7	6	7	10	*14*
Rheumatic fever (400-402) ..	M.	181	165	130	14	21	16	7	7	7	*11*	9	*24*
	F.	232	207	168	16	23	25	9	8	8	*12*	9	35
Chronic rheumatic heart disease (410-416)	M.	3,830	3,760	3,222	247	291	70	158	160	162	194	119	104
	F.	6,342	6,224	5,246	391	587	118	242	244	244	297	220	167

Table C.—*continued*

Cause of Death (and International classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Arteriosclerotic heart diseases including coronary disease (420)	M.	M:81,060	43,988	36,579	2,418	4,991	M:2,059	M:3,345	1,867	1,843	1,904	2,044	M:3,073
	F.	F:73,179	25,298	21,281	1,151	2,866	F:1,646	F:2,793	992	990	873	1,073	F:2,335
Degenerative heart disease (421, 422)	M.		35,013	28,764	2,048	4,201			1,486	1,449	1,613	1,720	
	F.		46,235	38,699	2,287	5,249			1,814	1,753	1,735	1,964	
Other diseases of heart (430-434)	M.	4,015	3,792	3,064	206	522	223	166	161	154	162	214	333
	F.	4,574	4,290	3,465	208	617	284	175	168	161	158	231	403
Hypertension with heart disease (440-443)	M.	5,646	5,447	4,784	297	366	199	233	231	241	234	150	297
	F.	6,681	6,438	5,642	271	525	243	255	253	262	206	196	345
Hypertension without mention of heart (444-447)..	M.	4,403	4,333	3,666	259	408	70	182	184	185	204	167	104
	F.	4,570	4,484	3,826	231	427	86	174	176	178	175	160	122
Other circulatory diseases (450-468)	M.	7,700	7,552	6,465	393	694	148	318	321	326	309	284	221
	F.	8,368	8,242	7,094	418	730	126	319	323	330	317	273	179
Influenza (480-483)	M.	1,051	1,020	826	53	141	31	43	43	42	42	58	46
	F.	1,076	1,046	812	59	175	30	41	41	38	45	65	43
Pneumonia (490-493, 763) ..	M.	11,082	10,775	9,310	472	993	307	457	456	469	372	407	458
	F.	9,956	9,714	8,472	354	888	242	380	381	394	269	332	343
Bronchitis (500-502)	M.	19,221	18,985	16,616	1,078	1,291	236	793	806	837	849	529	352
	F.	10,472	10,308	9,075	499	734	164	400	404	422	379	275	233
Other diseases of respiratory system (470-475, 510-527) ..	M.	3,658	3,572	2,659	516	397	86	151	152	134	406	163	128
	F.	1,693	1,638	1,326	75	237	55	65	64	62	57	89	78
Ulcer of stomach and duodenum (540-541)	M.	4,614	4,543	3,837	222	484	71	190	193	193	175	198	106
	F.	1,514	1,480	1,274	51	155	34	58	58	59	39	58	48
Appendicitis (550-553)	M.	668	662	560	38	64	6	28	28	28	30	26	*9*
	F.	513	501	431	16	54	12	20	20	20	*12*	20	*17*
Intestinal obstruction and hernia (560-561, 570)	M.	1,840	1,795	1,490	98	207	45	76	76	75	77	85	67
	F.	1,819	1,773	1,479	77	217	46	69	70	69	58	81	65
Gastritis, enteritis and diarrhœa, except diarrhœa of newborn (543, 571-572)	M.	1,285	1,218	978	87	153	67	53	52	49	69	63	100
	F.	1,562	1,508	1,245	88	175	54	60	59	58	67	65	77
Cirrhosis of liver (581)	M.	765	745	590	55	100	20	32	32	30	43	41	30
	F.	559	545	456	23	66	14	21	21	21	17	25	*20*

Table C. — *continued.*

Cause of Death (and International classification numbers)	Sex	Deaths						Death Rates per million living					
		United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland	United Kingdom	Great Britain	England	Wales	Scotland	Northern Ireland
Nephritis and nephrosis (590-594)	M.	3,362	3,260	2,739	255	266	102	139	138	138	201	109	152
	F.	3,270	3,181	2,654	225	302	89	125	125	123	171	113	126
Hyperplasia of prostate (610) ..	M.	4,931	4,804	4,013	338	453	127	203	204	202	266	186	190
Complications of pregnancy, child birth and puerperium (640-689)	F.	621	590	465	33	92	31	24	23	22	25	34	44
Congenital malformations (750-759)	M.	2,757	2,622	2,171	152	299	135	114	111	109	120	122	201
	F.	2,563	2,441	2,002	128	311	122	98	96	93	97	116	173
Birth injuries, postnatal asphyxia and atelectasis (760-762) ..	M.	3,206	3,054	2,488	168	398	152	132	130	125	132	163	227
	F.	2,023	1,939	1,561	106	272	84	77	76	73	80	102	119
Diarrhœa of newborn (764) ..	M.		54	36	4	14			2	2	*3*	*6*	
	F.	M: 728	36	22	4	10	M: 21	M: 30	1	1	*3*	*4*	M: 31
Other infections of newborn (763, 765-768)	M.	F: 505	653	529	46	78	F: 20	F: 19	28	27	36	32	F: 28
	F.		449	376	28	45			18	17	21	17	
Other diseases of early infancy, and immaturity unqualified (770-776)	M.	3,346	3,181	2,461	234	486	165	138	135	124	184	199	246
	F.	2,458	2,361	1,875	143	343	97	94	93	87	108	128	138
Senility without mention of psychosis, ill-defined and unknown causes (790-795)	M.	4,277	3,898	2,667	330	901	379	177	165	134	260	369	566
	F.	6,228	5,770	4,319	429	1,022	458	238	226	201	325	382	650
All other diseases (Remainder 001-795)	M.	9,976	9,620	7,929	595	1,096	356	412	408	399	469	449	531
	F.	12,170	11,778	9,712	695	1,371	392	465	462	452	527	513	556
Motor vehicle accidents (E810-E835)	M.	3,570	3,473	2,961	186	326	97	147	147	149	147	133	145
	F.	1,118	1,095	910	60	125	23	43	43	42	46	47	33
All other accidents (E800-802, E840-962)	M.	7,046	6,877	5,373	477	1,027	169	291	292	271	376	422	252
	F.	5,082	4,948	3,939	256	753	134	194	194	183	194	282	190
Suicide and self-inflicted injury (E963, E970-E979)	M.	3,007	2,977	2,655	133	189	30	124	126	134	105	77	45
	F.	1,653	1,642	1,489	61	92	11	63	64	69	46	34	*16*
Homicide and operations of war (E964, E965, E980-E999) ..	M.	224	219	195	12	12	5	9	9	10	*9*	*3*	*7*
	F.	107	106	88	7	11	1	4	4	4	*5*	*4*	*1*

INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS IN THE YEAR 1952

United Nations

The adoption of the principle of biennial sessions for the Population Commission meant that there was no meeting in 1952. Nor, for the same reason, was there a meeting of the Statistical Commission. It was, therefore, a comparatively uneventful year for demographic statistics in the meeting rooms of United Nations. The Economic and Social Council held its Fourteenth Session in New York between the 20th May and the 1st August, but the only item on its agenda relevant to the present Review concerned the arrangements for the proposed World Population Conference. The Council recorded its approval[1] of the project for a World Population Conference of experts to be held in 1954 under the auspices of United Nations in close collaboration with the International Union for the Scientific Study of Population and those of the specialised agencies having an interest in demographic matters.

United Nations Statistical Commission

In the Text Volume for 1951 reference was made at some length to the history and functions of the Population Commission and although the Statistical Commission did not meet during the period now under review, it is perhaps convenient now to give a brief indication of the scope and functions of that Commission so far as relevant to the work of the General Register Office. The Statistical Commission of United Nations is one of the advisory bodies set up by the Economic and Social Council in 1946[2]. The Commission's terms of reference make it responsible for assisting the Council (*a*) to encourage the development of national statistics and their international comparability; (*b*) to co-ordinate the statistical work of the specialised agencies; (*c*) to develop the central statistical services of the Secretariat; (*d*) to advise the organs of United Nations on general aspects of the collection, interpretation and dissemination of statistical information; and (*e*) to further the improvement of statistics and statistical methods generally. The Statistical Office of the United Nations services the Statistical Commission and assists the Population Division to service the Population Commission.

Before the formal constitution of the Statistical Commission there was a meeting in 1946 of the "nuclear" Commission at which Mr. H. Campion, Director of the Central Statistical Office, was the United Kingdom representative.

Since January, 1947, after it was formally constituted, the Statistical Commission had held six sessions, the last one in May, 1951. With one exception, when it met at Geneva, the meetings took place in New York. Professor R. G. D. Allen (London School of Economics and Political Science) acted as United Kingdom representative at the first two of these sessions, while Mr. Campion was seconded as Head of the newly formed Statistical Office of the United Nations. Mr. Campion resumed the United Kingdom representation on the Statistical Commission at the later sessions.

Discussion in the Statistical Commission in relation to population and vital statistics has been mainly concerned with questions of statistical methodology or the linking of population statistics with other statistics. Matters which the Statistical Commission and the Population Commission have considered in

collaboration include recommendations on ways in which comparability between national censuses could be improved, the elaboration of standard international classifications of industry and occupation, questions of statistical methodology and comparability in vital statistics, plans for improving migration statistics, and the preparation of a booklet expounding the principles of vital registration and statistics.

World Health Organization

The Executive Board of WHO held its Ninth Session at Geneva between the 21st January and the 4th February. Population questions were the subject of three resolutions.[3] In the first the Executive Board expressed satisfaction with the collaboration in demographic problems undertaken or to be undertaken by the World Health Organization with United Nations, with emphasis on the exclusively technical character of the role of WHO. This emphasis reflected the limitations which it was felt to be prudent to stress in response to a request by the Government of India for the Organization's help in carrying out experimental field studies in the rhythm method of birth control. The second resolution recommended to the World Health Assembly the adoption of certain other resolutions arising out of the Report of the WHO Expert Committee on Health Statistics (*see below under Fifth World Health Assembly*). Thirdly, the Executive Board endorsed the Director-General's reply to a questionnaire circulated by the UN Department of Social Affairs, the essence of which was an indication of WHO's desire to participate in the forthcoming World Population Conference. The Board expressed the opinion that it would be premature to hold a conference of this nature before 1954, since it was desirable that the results of the crop of censuses taken around the years 1950 and 1951 should be available as fundamental data. The Director-General was enjoined to proceed with the necessary plans for the Organization's participation in the conference which ultimately took place in September 1954.

Fifth World Health Assembly

The Fifth World Health Assembly took place in Geneva from the 5th to the 22nd May. The United Kingdom Delegation included Mr. R. M. Blaikley, a Principal in the General Register Office, as Adviser on health statistics. The Assembly noted[4] the Report of the Expert Committee on Health Statistics which had met in 1951; it invited the attention of member governments to the recommendations in the Report concerning national committees (or equivalent bodies) on vital and health statistics, and enjoined member governments to encourage the medical profession, especially through university clinical education, to collaborate in the proper reporting of morbidity and causes of death, while maintaining a due regard to confidentiality. The cleavage of opinion in the Assembly on the subject of birth control led to the withdrawal of certain draft resolutions that had been canvassed on the subject.

International Congress on Medical Records

An International Congress on Medical Records, the first of its kind, conducted under the auspices of the Association of Medical Records Officers, met at King's College, London, between the 8th and the 12th September. The opening address was delivered by the Chief Medical Officer of the Ministry of Health. The General Register Office participated in the work and members of the staff delivered the following papers:—

Cancer Registration and Follow-up: by Dr. W. P. D. Logan.
Mental Health Records: by Miss Eileen M. Brooke.
Tuberculosis Notification and Registration: by Mr. B. Benjamin.
The Hospital In-patient Enquiry: by Dr. Donald MacKay.
General Practitioners' Records: by Mr. A. Cushion.

The former Chief Medical Statistician at the General Register Office, Dr. Percy Stocks, also addressed the Conference on "The International Aspect of Medical Records".

Visits to and visitors from other countries

In the course of the year Dr. Logan, Chief Medical Statistician of the General Register Office, visited Holland to see the Dutch Cancer Registration Scheme in operation. The General Register Office received visitors and students with a technical interest in its work from the following countries:—Australia, Canada, Chile, Denmark, Guiana (British), India, Mauritius, Pakistan, Puerto Rico, Sarawak, Sierra Leone, Sweden, United States of America, Yugoslavia.

REFERENCES

1. *Economic and Social Council Official Records*: *Fourteenth Session 20th May to 1st August* 1952. *Supplement No.* 1. Resolution 435 (XIV) World Conference on Population.
2. Resolutions 8(I) of 16.2.46 and 8(II) of 21.6.46.
3. *Official Records of the World Health Organization No. 40.* Resolutions on population problems (EB9.R82); Expert Committee on Health Statistics (EB9.R86); World Population Conference (EB9.R87).
4. *Official Records of the World Health Organization No. 42.* Resolution on vital and health statistics (WHA5.26).

THE REGISTRATION SERVICE

Local Organization

As a result of further reorganisation in registration districts the number of registration posts was reduced in 1952 from 1,986 to 1,979. The number of officers paid by fees continued to decline. The following table shows the position at the end of 1952:

Registration Posts

	Salaried Posts	Posts held by fee-paid Officers	Total
Superintendent Registrar	505	22	527
Registrar of Births and Deaths	1,208	18	1,226
Additional Registrar	168	—	168
Registrar of Marriages	—	58	58
Total	1,881	98	1,979

Searches and Certificates

Table CI., shows the extent to which the records in the General Register Office have been used since 1866.

Table CI.

Year*	Total Searches	Searches for Govt. Depts.	Searches paid for by the public	Certificates issued	Amount Received
					£ s. d.
1866	12,135	—	12,135	10,017	1,860 15 6
1875	26,356	—	26,356	20,282	3,879 15 6
1885	36,450	—	36,450	27,682	5,317 13 6
1895	53,289	—	53,289	35,727	7,200 12 6
1905	65,142	—	65,142	50,310	9,611 9 0
1915	202,939	118,788	84,151	69,746	13,007 10 0
1925‡	488,781	339,790	148,991	115,378	25,610 2 6
1935	591,056	443,783	147,273	119,351	26,221 9 6
1945	569,266	380,730	188,536	187,077	39,474 14 3
1946	826,380	544,843	281,537	271,208	56,676 8 9
1947	1,180,519	873,868	306,651	299,525	61,900 15 6
1948‡	943,705	658,251	285,454	350,626	56,954 15 9
1949	793,386	527,814	265,572	310,723	52,728 3 6
1950	732,511	486,386	246,125	285,487	51,215 17 8
1951	809,702	555,067	254,635	312,595	52,966 8 0
1952	778,139	545,390	232,749	293,384	†57,569 7 6

† On 1st July, 1952, fees were increased by 50 per cent.

* These periods relate to 52 weeks except those marked ‡ which relate to 53 weeks.

Table CII analyses the searches undertaken on behalf of Government Departments since 1946.

Table CII.

	Year*						
	1946	1947	1948†	1949	1950	1951	1952
Contributory Pensions and National Insurance Benefits ...	301,937	415,294	411,897	264,344	300,050	354,952	355,655
Family Allowances ...	78,987	362,846	170,204	182,308	127,013	147,743	138,115
Non-Contributory Pensions	58,321	46,863	38,250	23,917	22,430	13,210	10,825
Ministry of Pensions ...	94,350	39,010	27,028	25,456	20,593	19,748	18,574
Navy, Army & Air Force	11,248	9,855	8,872	10,932	7,612	12,339	13,817
Others	—	—	2,000	20,857	8,688	7,075	8,404
Total	544,843	873,868	658,251	527,814	486,386	555,067	545,390

Table CIII shows the numbers of Birth and Adoption certificates issued from the General Register Office since 1946 including short certificates introduced in 1947.

Table CIII.

Year*	Birth Certificates			Adoption Certificates			Adoptions Registered
	Standard	Short	Total	Standard	Short	Total	
1946	195,163	—	195,163	22,000	—	22,000	21,280
1947	211,000	1,060	212,060	18,600	1,150	19,750	18,269
1948†	176,631	62,662	239,293	13,112	32,331	45,443	18,550
1949	158,510	59,167	217,677	13,464	20,370	33,834	17,331
1950	143,135	55,307	198,442	10,102	15,824	25,926	12,748
1951	153,935	67,697	221,632	10,080	15,688	25,768	13,854
1952	132,431	73,505	205,936	9,940	14,666	24,606	13,900

* These periods relate to 52 weeks except those marked † which relate to 53 weeks.

Adoption of Children

During 1952 entries relating to the adoptions of 13,900 children were made in the Adopted Children Register maintained by the Registrar General under the Adoption Acts, 1926-1950. An analysis of adoptions recorded since 1927 is given in Table T 3 of the Registrar General's Statistical Review for 1952, Tables Part II, Civil.

Re-registration of Births under the Legitimacy Act, 1926

During 1952 the births of 2,588 legitimated persons were re-registered. The numbers of births re-registered since 1927, when the Legitimacy Act, 1926, came into operation, are given in Table T 2 of the Registrar General's Statistical Review for 1952, Tables Part II, Civil.

Registration of Births, Deaths and Marriages Abroad

An account of the various arrangements for registration of births, deaths and marriages of British subjects, including members of H.M. Forces, abroad, and for the registration of births and deaths at sea and in the air was given in the Registrar General's Statistical Review, Civil Text, 1946-1950, pages 164-166.

The numbers of events recorded during 1952 are shown in the following table:—

Form of Record	Births	Deaths	Marriages
Consular	4,023	842	523
Army and Air Force	4,720	895	1,183
Naval	—	104	—
Marine	58	640	—
Air	—	37 deaths 13 missing persons	—
U.K. Deputy High Commissioners (India and Pakistan)	677	52	—
Foreign Marriages registered at the General Register Office	—	—	7
Certificates of Marriages according to Local Law overseas deposited at the General Register Office	—	—	76

Offences under the Registration Acts

In 1952 five persons were prosecuted for failing to comply with a requisition to register a birth and four convictions were obtained. One person was prosecuted and found guilty of giving false information for insertion in a birth entry; one person was found guilty of forging a birth certificate and one of forging a death certificate. Seven prosecutions were instituted under the Perjury Act, 1911, against persons making false declarations for the purpose of procuring marriages and a conviction obtained in each case.

NATIONAL REGISTRATION

End of National Registration

National Registration was brought to an end by an Order in Council (The National Registration Act (End of Emergency) Order, 1952—S.I.1952 No. 1035) made 23rd May, 1952, naming 22nd May, 1952, as "the date on which the emergency that was the occasion of the passing of the National Registration Act, 1939, came to an end". The use of identity cards had been discontinued from 21st February, 1952, when the Minister of Health had made an announcement in the House of Commons saying "Her Majesty's Government have decided that it is no longer necessary to require the public to possess and produce an identity card, or to notify change of address for National Registration purposes though the numbers will continue to be used in connection with the National Health Service".

A review of the work of the National Register during the 12½ years of its existence appears in the Statistical Review, Text Volume for 1951.

Setting up of National Health Service Central Register

As stated in the previous Review (Text Volume, 1951) the National Health Service adopted the National Registration number for the purpose of its records and also decided to set up a Central Register based on the National Registration records at Southport. As a result of this decision, it was necessary to note the National Registration record of every person who was registered with a doctor under the National Health Service to show the Executive Council area in which the person was living. Started in 1951, this work was virtually completed in 1952, nearly 22,000,000 entries being noted during the year. During the course of noting these entries it was revealed that about 460,000 of the persons on doctors' lists had died, left the country or joined H.M. Forces and over 600,000 were registered with two doctors.

Arrangements were also made for the allocation of N.H.S. numbers to persons entering the National Health Service who had not been included in the National Register, i.e. immigrants, persons released from H.M. Forces and newly born babies.

In the year under review Executive Councils were notified by the Central Register of 1,088,899 exits (about 510,000 deaths, 305,000 enlistments and 275,000 embarkations).

During the course of the year the Central Register dealt with 1,367,320 notifications of ostensible first registrations in the National Health Service. Of these 59,013 persons were found to have been accepted previously by another doctor in the National Health Service. In addition 1,289,037 transfers to a fresh doctor on removal from one Executive Council area to another were dealt with.

The Dental Estimates Board uses the National Health Service number for identity purposes for persons receiving dental treatment. The Register deals with number and other discrepancies referred to it by the Board.

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

Electoral Registers

As required by the Electoral Registers Act and the Representation of the People Act, 1949, a local register based on a canvass is prepared in the autumn of each year, distinguishing between (*a*) those who are parliamentary and local government electors by virtue of residence on the qualifying date and (*b*) local government electors who on the qualifying date had a non-resident qualification by occupying as owner or tenant any rateable land or premises of not less than £10 rateable value per occupier. There is also a service register for any members of the forces and other persons employed in the service of the Crown in a post outside the United Kingdom (and for their wives if with them). The qualifying date is 20th November in England and Wales and the registers must be published not later than 15th March of the following year.

Total Electorate

The particulars recorded in Tables U and V for 1952 have been taken from statements furnished to the Registrar General by the Electoral Registration Officers of the several areas, and relate to the register which came into force on 16th March, 1952.

Table CIV.—Parliamentary and Local Government Electors. England and Wales, 1918 to 1952.

Register	Parliamentary Register (including University Constituencies to 1948)			Local Government Register
	Total	Business Premises qualifications (included in total)	Persons on Absent Voters' List (included in total)	
1918 (Autumn)	17,222,983	159,013	3,362,028	13,930,130
1928 (Autumn)	19,866,649	205,793	154,432	17,179,487
1929 (Spring)	25,095,793	371,594	174,731	18,620,395
1939 (Autumn)	28,348,555	354,831	168,480	21,685,772
(Qualifying date in brackets)	Total at qualifying date	Business Premises Register (included in total)	Service Register (included in total)	Local Government Register at qualifying date
1945 (30th June)	29,368,684	55,164	2,749,531	29,216,823
1948 (30th June)	31,629,861	49,575	284,004	31,455,419
1949 (10th June)	30,173,966	—	127,334	30,258,862
1950 (20th Nov. 1949)	30,206,667	—	164,743	30,306,024
1951 (20th Nov. 1950)	30,392,459	—	216,749	30,501,106
1952 (20th Nov. 1951)	30,472,288	—	272,264	30,584,434

Table U refers to Parliamentary and Table V to Local Government electors and elections. From these tables has been extracted the summary in Table CIV showing the total electorate at various dates, selected to demonstrate the changing franchise. Comparison of the registers of 1928 and 1929 shows the effect of the commencement of the Act of 1928, the first to give to women the same franchise as to men, and comparison of the registers of 1939 and 1945 indicates the effect of the Act of 1945, which increased the local government electorate by the addition of those qualified for the parliamentary electorate but previously not entitled to vote at local government elections.

The total Parliamentary Electorate included prior to 1949 plural representation in the case of those persons registered in more than one constituency by reason of their possessing the necessary residence or business qualification or being entitled to be registered in respect of a University constituency.

A person not of full age on the qualifying date but of full age on the following 15th June is to be included on the register though there is no entitlement to vote in any election before 2nd October of the following year. Such persons have been excluded from the table; the 1951 register was the first to be affected in this way.

The percentages which the total parliamentary electorate represented of the estimated total population in 1938 and 1939 and from 1945 to 1952 were:—

1938	1939	1945	1946	1947	1948	1949	1950	1951	1952
68·4	68·4	68·9	72·0	72·6	72·7	68·9	68·6	69·1	69·0

The changes made in Parliamentary franchise between 1939 and 1945-48 did not affect sufficiently large numbers of persons to exert a significant influence on the percentages, but the proportion of minors in the post-war population was lower than in 1939 and a rise of some 1-2 per cent in the electoral proportion was to be expected on this account alone. The low proportion in 1945 is probably to be attributed in part to a degree of incompleteness in the service register of that year. The fall in the proportion in 1949 was probably due to the resumption of canvass methods of compiling the register in place of the machinery of National Registration used from 1944 to 1948.

In contrast the Local Government franchise was made larger after the war. Reference should be made to the Acts concerned, in particular to those of 1928, 1943, 1944 and 1945, for a precise record of the changes made, but in brief the *parliamentary* qualification had previously been based on *residence* and the *local* qualification on *occupation* of property; the Act of 1945 changed the basis of *local* qualification to residence *or* occupation. The change resulted in a substantial rise in the proportion of the total population included in the local electorate from 51·8 per cent and 52·3 per cent in 1938 and 1939 respectively to 71·6 per cent in 1946 and 69·2 in 1952, the latter proportions being virtually the same as those for Parliamentary electors.

Central Index of Service Voters.

The Central Index of Service Voters is maintained at the General Register Office, Southport.

Persons having a service qualification entitling them to make a service declaration to an Electoral Registration Officer and to be included in the Central Index are:—

(*a*) any person who is a member of the forces;

(*b*) any person who is employed in the service of the Crown in a post outside the United Kingdom;

(*c*) any woman who is the wife of a person having a service qualification and is residing outside the United Kingdom to be with her husband.

A service declaration may be made by a person under full age although not yet entitled to be registered or to vote.

During 1952 the Central Index received 136,230 declarations from Electoral Registration Officers, of which 52,016 were in respect of persons under full age. Electoral Registration Officers were notified by Central Index in 1952 of 15,385 declarants who had attained full age during the year. Altogether almost 100,000 new service voters were added to the electoral registers during the year.

In the same period 15,408 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age. Electoral Registration Officers were also notified of 83,469 names of persons whose declarations ceased to be in force because of death, discharge from forces, return from abroad of wives and Government servants, etc.

APPENDIX A

Manner of Solemnization of Marriages of Divorced Persons

Appendix B to the Registrar General's Statistical Review Tables Part II Civil for 1952 contains statistics of all marriages in England and Wales in 1952 according to manner of solemnization.

The following table gives details of the manner of solemnization of marriages where one party or both parties had previously been divorced.

These figures should not be regarded as necessarily showing the relative extent to which the various religious bodies are prepared to remarry divorced persons, and they should be read in conjunction with the total numbers of marriages performed in register offices and places of worship (column 2). It should also be noted that the geographical distribution of the registered buildings of the various denominations has no relation to the distribution of divorced persons. Numbers of registered buildings belonging to the various denominations are shown in the last column of the table.

Marriages of Divorced Persons by Manner of Solemnization, England and Wales, 1952

	Total number of marriages	Marriages of divorced persons	Number of buildings &c., where marriages may be solemnized
(1)	(2)	(3)	(4)
TOTAL	**349,308**	**40,205**	—
Civil Marriages	**106,777**	**35,349**	—
Marriages with Religious Ceremony:			
Total	**242,531**	**4,856**	—
Established Church and Church in Wales ...	173,282	58	*—
Roman Catholics ...	33,050	241	2,232
Methodists	16,640	2,004	9,277
Congregationalists ...	6,952	1,222	3,379
Baptists	5,277	624	3,291
Presbyterians	1,806	306	451
Calvinistic Methodists	1,056	41	1,227
Salvation Army ...	361	24	591
Society of Friends ...	76	5	*—
Jews	1,876	122	*—
Others	2,155	209	3,178

* It is not necessary for buildings to be registered for the solemnization of marriages according to the rites and ceremonies of the Established Church and the Church in Wales or of Quaker or Jewish marriages.

APPENDIX B

Table 1.—Estimated Total Population by Sex, Age and Marital Condition, England and Wales, Mid-1951

Note.—This is a revised estimate based upon the final data by sex and age from the 1951 census.

(*Thousands*)

Age Group	Persons	Males				Females			
	All Conditions	All Conditions	Single	Married	Widowed and Divorced	All Conditions	Single	Married	Widowed and Divorced
0– ..	3,729	1,910	1,910	—	—	1,819	1,819	—	—
5– ..	3,210	1,642	1,642	—	—	1,568	1,568	—	—
10– ..	2,799	1,422	1,422	—	—	1,377	1,377	—	—
15– ..	2,765	1,395	1,387	8	—	1,370	1,312	58	—
20– ..	2,983	1,494	1,152	341	1	1,489	778	707	4
25– ..	3,276	1,635	577	1,050	8	1,641	358	1,262	21
30– ..	3,126	1,547	294	1,235	18	1,579	229	1,307	43
35– ..	3,313	1,632	217	1,389	26	1,681	221	1,398	62
40– ..	3,371	1,667	180	1,454	33	1,704	239	1,384	81
45– ..	3,204	1,567	154	1,374	39	1,637	249	1,277	111
50– ..	2,805	1,313	113	1,151	49	1,492	224	1,100	168
55– ..	2,433	1,089	84	945	60	1,344	208	900	236
60– ..	2,153	944	74	785	85	1,209	189	695	325
65– ..	1,831	780	65	602	113	1,051	162	501	388
70– ..	1,428	592	50	405	137	836	132	308	396
75 and over	1,581	604	47	306	251	977	161	197	619
All Ages	**44,007**	**21,233**	**9,368**	**11,045**	**820**	**22,774**	**9,226**	**11,094**	**2,454**

APPENDIX B

Table 2. —(*a*) **Population in thousands at ages 15-50**
(*b*) **Annual Marriages at ages under 50** } **1952. England and Wales**

Note.—In section (*e*), not stated ages have been rateably distributed.

Age	Population in thousands						Proportion married [(*b*) ÷ (*a*)] (*d*)		Number of marriages in hundreds (*e*)		Marriages per 1,000 non-married at each age [(*e*) ÷ (*c*)] (*f*)	
	All marital conditions (*a*)		Married (*b*)		Non-married (single, widowed and divorced) (*c*)							
	M	F	M	F	M	F	M	F	M	F	M	F
15–20	1,393	1,368	7	58	1,386	1,310	·0050	·0424	82·3	532·4	5·9	40·6
20–25	1,484	1,471	346	720	1,138	751	·2332	·4895	1,414·8	1,668·0	124·3	222·1
25–30	1,592	1,590	1,032	1,237	560	353	·6482	·7780	979·2	583·1	174·9	165·2
30–35	1,603	1,630	1,287	1,361	316	269	·8029	·8350	389·7	250·1	123·3	93·0
35–40	1,583	1,632	1,351	1,368	232	264	·8534	·8382	194·7	147·1	83·9	55·7
40–45	1,659	1,697	1,450	1,390	209	307	·8740	·8191	129·6	102·1	62·0	33·3
45–50	1,588	1,648	1,394	1,292	194	356	·8778	·7840	91·8	78·5	47·3	22·1
15–50	10,902	11,036	6,867	7,426	4,035	3,610	·6299	·6729	3,282·1	3,361·3	81·3	93·1
20–40	6,262	6,323	4,016	4,686	2,246	1,637	·6413	·7411	2,978·4	2,648·3	132·6	161·8

APPENDIX C

STATISTICS DIVISION OF THE GENERAL REGISTER OFFICE
1st JANUARY, 1955

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R. M. Blaikley
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Professional : B. Benjamin, B.Sc., Ph.D., F.I.A., } Chief
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A. McKenzie, M.B., B.S., D.T.M. & H.
Miss M. P. Newton, M.A.
J. R. L. Schneider, B.Sc.(Econ.)

APPENDIX D

COMMITTEES ON WHICH OFFICERS OF THE GENERAL REGISTER OFFICE SERVED DURING THE YEAR 1952

Accidents in the Home,
  Standing Inter-Departmental Committee.
Boundary Commission for England.
Boundary Commission for Wales.
Medical Nomenclature and Statistics Committee,
  Sub-Committee on the Reporting and Indexing of Hospital Diagnoses.
  Sub-Committee on Cancer Registration.
  Sub-Committee on Statistics.
  Sub-Committee on the Adaptation of the International Statistical Classification to the Needs of the Armed Forces.
Medical Research Council,
  Committee for Research on Social and Environmental Health,
    Steering Committee on Morbidity Statistics.
    Sub-Committee on Mass Miniature Radiography.
Ministry of Health,
  Working Party on Hospital Statistics.
  Working Party on Local Health Authority Statistics.
Ministry of Pensions,
  Committee on Cardio-Vascular disease and Mortality rates among Amputees.
National Coal Board,
  Advisory Panel on Epidemiology.
National Health Service,
  Remuneration of General Medical Practitioners,
    International Distribution Committee.
    Medical Distribution Committee (England and Wales).
  Records Committee.
Organisation for European Economic Co-operation,
  Committee of Demographic Experts.
Population Investigation Committee.
Social and Economic Research,
  Inter-Departmental Committee.
World Health Organization,
  Expert Committee on Health Statistics.

APPENDIX E

ARTICLES BY OFFICERS OF THE GENERAL REGISTER OFFICE PUBLISHED DURING 1952

Benjamin (B.) .. .. People, Jobs and Houses. *The Lancet*, No. 6725: 125 ff., 1952.

Brooke (E. M.) .. .. .. Deaths from Rheumatoid Arthritis 1940-1949. *Monthly Bulletin of the Ministry of Health*, Vol. 11, 57 ff., 1952.

Brooke (E. M.) .. .. .. Sickness and Incapacity. *Monthly Bulletin of the Ministry of Health*, Vol. 11, 232 ff., 1952.

Logan (W. P. D.) .. .. .. Recent Trends of Diphtheria. *Monthly Bulletin of the Ministry of Health*, Vol. 11, 50 ff., 1952.

Logan (W. P. D.) .. .. .. Mortality from Coronary and Myocardial Disease in Different Social Classes. *The Lancet*, No. 6711: 758 ff., 1952.

Logan (W. P. D.) .. .. .. Distribution of Poliomyelitis by Sex, Age and Geographical Area. *Monthly Bulletin of the Ministry of Health*, Vol. 11, 147 ff., 1952.

Logan (W. P. D.) .. .. .. The Use of General Practice Records in Studying Morbidity. *Monthly Bulletin of the Ministry of Health*, Vol. 11, 224 ff., 1952.

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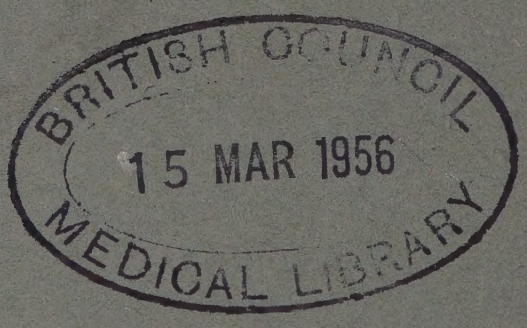

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